DOCUMENT RESUME

ED 360 198 SO 022 597

AUTHOR	Boeren, Ad J. J. M., Ed.; Epskamp, Kees P., Ed.
TITLE	Education, Culture and Productive Life. Proceedings of the Annual International Meeting of the Centre for the Study of Education in Developing Countries (25th, December 9-21, 1988). CESO Paperback No. 13.
INSTITUTION	Centre for the Study of Education in Developing Countries, The Hague (Netherlands).
REPORT NO	ISBN-90-6443-981-8-geb
PUB DATE	90
NOTE	477p.
AVAILABLE FROM	Centre for the Study of Education in Developing Countries, Badhuisweg 232, P.O. Box 90734, 2509 LS, The Hague, The Netherlands.
PUB TYPE	Books (010) -- Collected Works - Conference Proceedings (021)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Cultural Background; *Developing Nations; Economic Opportunities; *Educational Development; Educational Opportunities; Elementary Secondary Education; Foreign Countries; International Cooperation; Living Standards; Modernization; *Quality of Life; *Socioeconomic Influences; *Traditionalism; Vocational Education; Womens Education; Work Experience Programs
IDENTIFIERS	Africa; Asia (Southeast); Latin America; Netherlands

ABSTRACT

This book contains the partial proceedings of a symposium dedicated to concern for basic education for the masses. The book includes a position paper that focuses on education in relation to its cultural setting, socio-economic context, and partnerships in research. The result of the meeting was the identification of research that seemed instrumental in addressing problematic issues in education in developing countries. The outcomes of the research were expected to contribute to an improvement of the accessibility, relevance, and effectiveness of education. The volume contains 28 articles written by participants in the symposium, beginning with a position paper that provides the theoretical framework. The articles are grouped into four sections. The first section (Education, Culture and Development) contains a review of the major problems that developing countries face in providing adequate and relevant education to nations, and three articles highlighting the relationships among education, culture, and development. Section 2, "Education and Culture," deals more specifically with the link between education and culture, indigenous knowledge and indigenous learning, popular culture, creating of a national identity, and the relevance of social research in intervention systems. The third section is "Education and Productive Life." Articles in this section discuss education for self employment at the primary school level, work experience programs in secondary schools, and technical and vocational training for girls. The final section discusses educational research and networking. (DK)

ED360198

Education, Culture and Productive Life

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CESO
Badhuisweg 232
P.O. Box 90734
2509 LS The Hague, The Netherlands
Tel. (070) 3 510 591
Cable address NUFFIC
Telex 33656 nufic nl
Fax (070) 3 510 596

English translation vetted by:
Greet Hooymans and Cecile Somers

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CIP-GEGEVENS KONINKLIJKE BIBLIOTHEEK, DEN HAAG

Education

Education, culture and productive life / ed. Ad J.J.M. Boeren, Kees P. Epskamp.
– The Hague: Centre for the Study of Education in Developing Countries (CESO)
– (CESO paperback; nr. 13)
ISBN 90-6443-981-8 geb.
Trefw.: onderwijs; ontwikkelingslanden.

50

CESO PAPERBACK NO. 13

Education, Culture and Productive Life

Editors
Ad J. J. M. Boeren
Kees P. Epskamp

4

Acknowledgements

The symposium of which this publication is an outcome was made possible by generous subsidies from the following organizations - in alphabetical order:

Benevolentia, Netherlands
Commonwealth Secretariat, United Kingdom
Groningen State University, Netherlands
Haëlla Foundation
International Development Research Centre (IDRC), Canada
Ministry of Foreign Affairs, Netherlands
Ministry of Education and Science, Netherlands
Netherlands Organization for International Co-operation in Higher Education (NUFFIC), Netherlands
Swedish International Development Authority (SIDA), Sweden
Institute for Educational Research in the Netherlands (SVO), Netherlands

In preparing the manuscript for publication the contributions of many people need to be mentioned. First of all the authors of the articles for their willingness to adapt their symposium papers. Ms. Hooymans for vetting the linguistic aspects of the articles, Ms. Somers for going over those of the Introduction. Special thanks goes to the entire CESO secretariate, in particular to Helen Ishaak, Ellen Nix, Juliana Soetens and Cock van Rijswijk, for their relentless assistance in (re)typing this voluminous manuscript.

We here gratefully acknowledge the contributions of these organizations and persons.

The editors

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Introduction

Ad Boeren

CESO's anniversary

From 9-21 December 1988 CESO organized an international symposium to commemorate its 25th anniversary. The title chosen for this symposium was 'Education, Culture and Productive Life in Developing Countries'. It reflected the Centre's ten years of concern for basic education for the masses and expressed two of its current research interests, namely 'education and culture' and 'education and productive life'.

CESO opted for a symposium because this type of meeting allows scholars to come together and share ideas and experiences. It is an opportunity to think together and discuss, and finally to make plans, hopefully for joint action. Contentwise the symposium was designed to try and answer a number of relevant questions related to education in developing countries. A first set of questions referred to the past. What lessons could be drawn from looking back over the past 25 years? Some problems that had been experienced during the early sixties had been solved, or at least been clarified. But a greater number had not been solved and still persisted. So what had gone right and what had gone wrong? Although over the past 25 years growth had been forthcoming in education in developing countries, and although research and experiments had been conducted, in certain aspects disappointing progress was apparent. Apart from technical and external circumstances, could this possibly be attributed to wrong approaches in terms of content matter?

Other questions focused on the future. What lessons from the past should be implemented so as to avoid duplicating mistakes? What were the widely held assumptions that dominated national educational development plans and strategies and foreign aid priorities and practices in the 1960s and 1970s? In the light of experiences and changed circumstances, what modifications should be made at present? What could be the role of research in understanding the past and in preparing the practice and policies of the future?

In considering these questions the symposium was to give fresh attention to present and future developments in education in developing countries; to stimulate scientific research into the subject; and to provide suggestions for a possible new profile for CESO - as a research institute, as an institute providing support for policy purposes, as a centre for documentation and information, and as a key link in a national and international network of researchers and practitioners.

A restricted number of colleagues from all over the world were invited to participate and to deliver a written contribution. A core group of 25 specialists from the South, active in 16 developing countries, attended the entire symposium.

For a meeting like this to be a success is not only a matter of speaking and listening, but also a matter of asking the right questions. In order to provide a theoretical framework for the symposium, CESO produced a Position Paper which functioned as the main guideline, setting the themes for the discussions concerning the relationship between education, culture and productive life in developing countries.

After the symposium the results of the deliberations and discussions were compiled, analyzed and synthesized by CESO and subsequently published as the proceedings of the symposium.[1] The research suggestions listed in the proceedings are numerous and varied, and it would be difficult to try and summarize them here. On the basis of a broad categorization of the suggestions made, the following areas for research may be singled out: accessibility, quality and relevance of basic education, cultural context of learning needs and learning processes, management of education, education with production, school and work cultures, and media in education. Other areas focus on education for women, value education, literacy and education for the informal sector. Special reference is made to research issues and policies in the field of educational co-operation, and to research collaboration.

Education for All

From 5-9 March 1990 the World Conference on Education for All took place in Jomtien, Thailand. This Conference was jointly convened by the executive heads of UNICEF, UNDP, UNESCO and the World Bank. It was co-sponsored by an additional 18 governments and organizations, and was hosted by the Royal Government of Thailand. Some 1,500 participants met in Jomtien. Delegates from 155 governments, including policy-makers and specialists in education and other major sectors, together with officials and specialists representing some 20 intergovernmental bodies and 150 nongovernmental organizations discussed major aspects of Education for All. At the closing plenary session of the Conference two amended documents were adopted by acclamation: the *World Declaration on Education for All* and the *Framework for Action to Meet Basic Learning Needs*.[2]

These documents can be regarded as a 'worldwide consensus' on an expanded vision of basic education and a renewed commitment to ensure that the basic learning needs of all children, youngsters and adults are met effectively in all countries.

The expanded vision of the *World Declaration* encompasses the following:

- universalizing access and promoting equity;
- focusing on learning;
- broadening the scope and means of basic education;
- enhancing the environment for learning;
- strengthening partnerships.

The provision of basic education for all requires a number of conditions to be met, such as a supporting policy context; a mobilization of existing and new financial and human resources, public, private and voluntary; international solidarity and equitable and fair economic relations in order to redress existing economic disparities. (Inter-Agency Commission 1990a: p. 4-9)

It is obvious that the World Conference and the CESO Symposium, although of a different order, shared the same ultimate goal of meeting the learning needs of all children, youngsters and adults. The point of departure, scope, nature and emphasis of both meetings, however, varied considerably.

The World Conference in its preamble recalled that education is a fundamental right for all people, women and men, of all ages, throughout our world. It further underlined the importance of education in ensuring a safer, healthier, more prosperous, tolerant and co-operative world, and as a key to, though not sufficient condition for, personal and social improvement. As a platform of government officials, major donors and education specialists it tried to incite a major global commitment to basic education and, consequently, the *Framework for Action* contains quite a number of financial and political issues regarding basic education.

The CESO Symposium, on the other hand, was a meeting of researchers focusing on education in relation to its cultural setting and socio-economic context, and on partnerships in research. It resulted in the identification of research that seems instrumental in addressing problematic issues in education in developing countries. The results of this research are expected to contribute to an improvement of the accessibility, relevance and effectiveness of education. The Symposium did not limit its scope to basic education but addressed the whole formal education system, as well as all forms of non-formal and informal learning.

However, what has been discussed at the Symposium is in many respects in support of and complementary to certain aspects outlined in the *Framework for Action* of the World Conference. The need for research on education, culture and productive life is clearly implied in paragraphs 10 and 12 of the 'Principles of Action':

> *"The first step consists in identifying, preferably through an active participatory process involving groups and the community, the traditional learning systems which exist in the society, and the actual demand for basic education services, whether expressed in terms of formal schooling or non-formal education programmes. Addressing the basic learning needs (...) also means capitalizing on the use of traditional and modern information media and technologies to educate the public on matters of social concern and to support basic education activities. These complementary components of basic education need to be designed to ensure equitable access, sustained participation, and effective learning achievement. Meeting basic learning needs also involves action to enhance the family and community environments for learning and to correlate basic education and the larger socio-economic context. The complementary and synergistic effects of related human resources investments in population, health and nutrition should be recognized".*
>
> *"Current practices and institutional arrangements for delivering basic education, and the existing mechanisms for co-operation in this regard, should be carefully evaluated before new institutions or mechanisms are created".*
> (Inter-Agency Committee 1990a: p.4)

More specifically, educational research and research collaboration as discussed at the CESO Symposium seems highly relevant in the context of the following points of action mentioned in the World Conference's *Framework*:

Assessing needs and planning action (Action 1.1)
Especially when reference is made to:

- studies for the evaluation of existing systems (analysis of problems, failures and successes);
- identification of learning needs to be met, including cognitive skills, values, attitudes, as well as subject knowledge;
- the languages to be used in education;
- means to promote the demand for, and broad-scale participation in basic education;
- modalities to mobilize family and local community support;
- targets and specific objectives;
- indicators and procedures to be used to monitor progress in reaching the targets;
- the priority groups that require special measures;
- institutional and administrative arrangements needed.

Designing policies to improve basic education (Action 1.3)
Assuming that the action points advocated under 1.1. will form important determinants in the formulation of educational policies, and asserting that continuous monitoring and evaluation of policy implementations is essential in assessing their effectiveness, efficiency and impact, it is apparent that educational research has an important role to play in the design and modification of policies.

Improving managerial, analytical and technological capacities (Action 1.4)
Expertise and skills will be needed to carry out initiatives as well as training of all levels of education personnel. Again, these activities necessitate major inputs from research. Technical services and mechanisms to collect, process and analyze data pertaining to basic education need to be improved in all countries. Suitable instructional technologies, and the training of teachers and other educational personnel to work with them, need to be selected, tested and introduced.

Exchanging information, experience and expertise (Action 2.1)
The *Framework* suggests regional mechanisms, both intergovernmental and non-governmental, to promote co-operation in education and training, health, agricultural development, research and information, communications, and other fields relevant to meeting basic learning needs. Networks of researchers and research institutions, as discussed and propagated during the CESO Symposium, constitute a valuable instrument in the exchange of information, documentation and research reports, the exchange of

experiences and in the mutual support of initiating and implementing research activities. These networks can also be called upon to render advise in support of policy issues in education.

Undertaking joint activities (Action 2.2)
The CESO Symposium propagated collaboration in the field of research, both between institutions in the South and between institutions in the North and those in the South. Collaboration is not merely seen as a devise to enhance efficiency or fruitfully combine expertise and experience, but also as a very efficient instrument in capacity building of the participants in the collaboration. In this respect it perfectly ties in with action point no. 3.3., *Enhancing national capacities*.

A kaleidoscope of issues

This volume contains 28 articles written by participants to the symposium. For reasons of length, focus and quality, not all submitted contributions could be included in this book. In making a selection preference was given to those papers which closely reflected the main issues raised during the symposium and which at the same time discussed specific problems and solutions pertaining to the broad areas for research listed on page 14. For a complete list of papers prepared for the symposium we refer to Annex 2 of the Proceedings. Some of the papers which do not appear in this volume have been published in CESO's Verhandelingen and Occasional Paper Series[3]. Six symposium papers have been included in the *INNOTECH Journal*, Vol. 13 (1989) No.1, with permission from CESO[4].

Editorial work has been limited to shortening some papers, while in a few cases authors were asked to rearrange their text. The reader should bear in mind that for most authors English is not their native language. All texts have been vetted though without trying to intervene in differences in modes of expression.

Similar to its function before and during the symposium, CESO's Position Paper *Culture, education and productive life in developing countries* will provide the theoretical framework for this volume. As such it can be regarded as the theoretical complement to this very introduction.

According to their topic and focus, the articles that follow the Position Paper are grouped into four sections: 'Education, culture and development'; 'Education and culture'; 'Education and productive life', and 'Research and networking'. The sections and their constituent chapters are briefly introduced below.

Section 1: Education, culture and development

The first section contains four chapters. Habte's article (Chapter 1) opens the section with a concise review of the major problems that developing countries face in providing adequate and relevant education to the nation. The author calls for actions that will close the widening knowledge gap between the wealthy and poorest economies, for increased and better financial support for education, a strengthening of the management of the educational enterprise, and more emphasis on research and research capacity-building.

The three other articles - collectively as well as individually - highlight the relationship between education, culture and development. Kane's article (Chapter 2) calls attention to the socio-economic circumstances which hamper women in Africa to improve their lives through education, and to the phenomenon that most training opportunities rather suit the goals of projects and programmes than the needs and problems of the trainees.

In Chapter 3, Cheng explores the influence of culture on educational practices, work ethics and career counselling. Although focusing on East Asian nations he gives an extra dimension to the subject by comparing economic and educational characteristics of East Asia with those of Western Europe.

In the last chapter of this first section, Socrates describes the process and principles of a non-formal education system which aims to improve the quality of life of the rural poor through self-reliance. The system, called Delsilife, was developed and tested in South East Asia. It is an example of a participatory bottom-up approach, mobilizing the people into action and tapping their indigenous resources, capacities and social structures.

Section 2: Education and culture

The chapters in the second section more specifically deal with the intricate link between 'education' and 'culture'. Dubbeldam's article (Chapter 5) discusses concepts of culture, the inter-relatedness of cultural elements, cultural identity and change. The role of education in the preservation of cultural identity as well as in accommodating society to change is discussed. Important issues in this respect are the authority over the curriculum content and the diversification of the educational system.

Chapters 6-9 focus on indigenous knowledge and indigenous learning. Kater (Chapter 6) reflects on the relevance and usefulness of social research for intervention systems, in particular with regard to indigenous knowledge and learning systems. Barsaga (Chapter 7) reports on the findings of four case studies conducted to research the indigenous learning systems of four ethnic groups in South East Asia. On comparing the findings of the indigenous learning systems with the prevailing characteristics of the formal education system, the author advocates a mutually reinforcing integration of native and new learning systems which might lead to a more acceptable and better quality of rural education.

After an introduction about learning and education in traditional Thailand, Tunsiri (Chapter 8) describes a number of attempts and possibilities for integrating indigenous elements into the modern schooling system. Two strategies are discussed in more detail: a project that aims to increase educational opportunities at the lower secondary level, and a project at the upper secondary level, aimed at improving the employment opportunities of the students and at generating income through work and production in school.

Traditional learning in the area of popular culture is described by Patmo in Chapter 9. The author describes the traditional training of *dalangs*, the puppeteers of Indonesian *wayang* theatre. The author pleads for further research to find out whether traditional learning methods are also relevant and applicable to modern, technical and western learning contents.

In Chapter 10, Riberu describes the process of creating a national identity in Indonesia. After independence the government of Indonesia faced the enormous task of moulding the archipelago into one united nation. A common national base was developed by making a main trait of the cultural heritage of all ethnic groups in Indonesia the guiding principles for all political, economical and socio-cultural activities. The article discusses these principles, the so-called *Pancasila*, and the role education has played in the building of this national cultural identity.

Education and training for a neglected group of rural girls in Nepal is the topic of an article by Devkota (Chapter 11). The author describes the design and implementation of a non-formal education programme for this group. Results are listed and problems in the implementation of the Cheli Beti programme are discussed.

In Chapter 12, van Dam and Peter take stock of the results obtained with popular education approaches over the last few decades in Latin America. Popular education programmes take as a starting point the knowledge and experience of the participants in the groups. The methodology of popular education focuses on collective participation. On the basis of their analysis, the authors point at a number of critical issues - at a theoretical as well as a practical level - that seem to hamper the effectiveness of some of the programmes, and make suggestions for research issues that may help to overcome the identified bottlenecks.

Ooijens reports on a project that aimed to develop an educational model for the indigenous people of the National Territories in Colombia. The model was to strengthen the cultural identity of the people as well as prepare them for participation in the outside world. Local knowledge and resources were tapped to design the curricula. The article also discusses the socio-political factors which affected the implementation of the project.

The last chapter in this second section deals with theatre as a communication medium in community development. Chambulikazi, the author of this article, advocates the use of theatre to mobilize people because it combines the following basic elements: aesthetics, conscientization, dialogue and participation. These special features of popular theatre are discussed in the light of development theories and practices and are illustrated using case studies from Tanzania.

Section 3: Education and productive life

Section 3 contains nine chapters and starts off with an article by Cabral de Andrade (Chapter 15). The author reports on the findings and results obtained with programmes and projects aimed at education-cum-production in Latin America, the Caribbean and some African countries. Differences are observed between socialist and market economy countries with respect to the objectives, functionality and success of these programmes.

Malakela writes about a Tanzanian experience with education for self-employment at primary school level (Chapter 16). The article discusses the achievements and weaknesses of the Education for Self-Reliance policy which emphasizes the need to integrate mental and productive work.

The situation in Kenya is described by Sifuna in Chapter 17. Although education with production has not been officially embodied in the mainstream of the education system in Kenya, it is widely practised by self-help training institutions, especially in the Youth Polytechnics and Harambee Institutes of Technology. They have adopted education with production in order to meet capital and recurrent expenditures, and as a way of more effectively socializing young persons into the technical and social requirements of the work environment.

In Chapter 18, Jennings examines the extent to which different types of work experience programmes (WEP) in Commonwealth secondary schools have succeeded in achieving the objective of preparing more young people for the working world. The author discusses benefits to both schools and pupils, and makes suggestions for improving the effectiveness of these programmes.

Verghese, the author of Chapter 19, focuses the attention on the non-productive and alien scheme of education existing in India today. After comparing the indigenous Vedic system of education with the imported British educational system, and after an analysis of a survey conducted over two generations of women from two different communities, the author arrives at the formulation of an educational alternative which focuses on the preparation for productive life and orientation towards Indian culture.

Opportunities for girls in the Peoples Republic of China to participate in technical and vocational training is the topic of Chapter 20, written by Kan. The author argues that if women are to play their part in facing the challenge put forward by modern production methods, they need to have access to adequate training opportunities and unrestricted access to the labour market. However, as of yet girls' opportunities for training and employment remain very much determined by traditional values regarding the role of women in the family and society.

Chapter 21 focuses on the participants in the underground economy of Manila. The informal sector offers the poor and unemployed a real opportunity to provide their families with the minimum living requirements. The authors of the article, J. and M. Gatchalian, describe the various types of 'business' which the 'underground' entrepreneurs are involved in, the work environments, their socio-economic characteristics, problems and expectations.

Another article on the informal sector is written by Thomesen (Chapter 22). It presents a case study of a project aimed at upgrading the small scale industry of Pakistan's North-West Frontier Province. The transfer of technical skills took place by mobile training workshops travelling all over the province. The technical skills were complemented with training in other non-productive skills, such as administration and management.

In Chapter 23, Tunsiri and Somtrakool describe a vocational training and development project near the troubled Thai-Kampuchean border. The project aimed to raise people's income, secure occupation, uplift their morale, and by doing so, keep the people from migrating. Originally the project offered technical skill courses at the training centre. On the basis of an evaluation the project was modified. Technical courses were made to include non-technical courses such as management, marketing and planning for self-employment, and courses were organized with and for the communities in their villages.

Section 4: Educational research and networking

The first chapter of this fourth section focuses on evaluation research for work-related programmes. Droogleever Fortuijn, the author, distinguishes types of evaluation research according to the units to be evaluated, the purposes of evaluation, and the focus on the stages of action programmes. He specifies evaluation criteria and different quantitative and qualitative research strategies, with their strong and weak points. Research priorities in this field are indicated.

In Chapter 25, King makes an attempt to clarify some policies of the Netherlands government concerning aid to education by looking at one specific research institute in the Netherlands, CESO, which has had long-term relationships with overseas countries in the field of education. The author looks at its institutional tradition and illustrates its stand through some of its research and evaluation activities, as well as the role of CESO in the Dutch research community concerned with research on education in developing countries.

One of CESO's activities is described in more detail by Biervliet in Chapter 26. It regards a research proposal with the aim to identify, structure and coordinate educational research for development within a framework of North-South collaboration involving researchers in the Netherlands and in developing countries.

Collaboration is also the topic of Chapter 27, written by Hoppers. The article gives an overview of the origin and development of the EPTA (Education and Production in Theory and Action) network and its activities. It attempts to analyze the experiences of this network in East and Southern Africa as a mechanism for initiating and developing research in education and insuring greater interaction between policy makers, researchers and practitioners.

This last section is concluded by an article written by Ghani about the aims and activities of the South-East Asian Research Review and Advisory Group (SEARRAG). Similar to EPTA, the aims of SEARRAG are to enhance the exchange of information, to initiate and develop research in education, and to strengthen the relationship between research and policy-making in education. Some of the salient points are reported regarding educational research in the SEARRAG region arising from the different activities it has organized.

It is hoped that the chapters in this volume will provide the reader with an insight in the complex inter-relatedness of education, culture and productive life, and that they will underscore the importance of and possibilities for educational research in enhancing the role of education as an instrument for development and as a source of cultural identity.

Notes

1. Dubbeldam, Leo and Kees Epskamp (eds), *North-South collaborative research: proceedings of the International Symposium on 'Education, Culture and Productive Life in Developing Countries', The Hague, 9-21 December 1988.* The Hague, CESO, 1989. CESO Paperback No. 8.
2. Inter-Agency Commission for the World Conference on Education for All, (1990a) *World Declaration on Education for All*, (1990b) *Framework for Action to Meet Basic Learning Needs*. New York: Inter-Agency Commission, 1990.
3. Three symposium papers have been published in CESO's Verhandelingen and Occasional Paper Series:

- Jennings, Zellyne D., *Innovation in tertiary education in the Caribbean: distance teaching in the faculty of education at the university of the West Indies*. The Hague: CESO, 1990. - 20 p. CESO Verhandelingen No. 44.
- Pereira, Luis Filipe and Jan Visser, *The role of education in the process of cultural and socio-economic reintegration of children and teachers in the war zones of Mozambique*. The Hague: CESO, 1990. - 13 p. CESO Verhandelingen No. 45.
- Tarwotjo, *A preliminary study of a remote village in Central Java, Indonesia, for educational planning and village development*. The Hague: CESO, 1990. - 12 p. CESO Occasional Paper No. 2.

4. The six symposium papers published in the *INNOTECH Journal*, Vol.13 (1989) No.1, are:

- Aklilu Habte, The challenge of bridging the gap;
- Leo F.B. Dubbeldam, Culture and education: education as the agent of transfer and change;
- Cheng Kai Ming, From education to work: the cultural dimension;
- Eberhard Chambulikazi, Theatre as a communication medium in community development;
- Jan Visser and Luis Filipe Pereira, The role of education in the process of cultural and socio-econemical reintegration of children and teachers in the war zones of Mozambique;
- Antonio Cabral de Andrade, Education and production.

Culture, Education and Productive Life in Developing Countries

Leo F.B. Dubbeldam

CESO Position Paper, presented to CESO's Symposium on Education, Culture and Productive Life in Developing Countries.

People are born, grow up and live within a human society. That is to say a collection of people living and working in a particular area. They share, to a certain extent, the same norms, values and feelings of belonging. These features, which are not natural characteristics, are referred to as the culture of a society. Many definitions of the term culture exist, often formulated from a particular angle and thus representing refinements on other definitions.

The definition of culture chosen as a point of departure for the symposium is based on Linton's definition of culture of 1945. According to this definition, culture is:

> "*the configuration of learned behaviour and results of behaviour whose component elements are shared and transmitted by the members of a particular society*" (Linton 1964:21) - (to which we add:) in a continuous process of imitation and intended transfer as well as of adaptations and alterations as a result of its changing environment and its members' creativity.

It is not just a question of the natural capacity to survive and multiply the species. We are concerned with a specific added value, namely the knowledge and skills which are needed to control the natural environment and to determine the norms and forms of behaviour towards our fellow men, the supernatural and objects in general. People learn through the transfer of knowledge by other members of the society, for example older people, and not through hereditary factors.

Much confusion arises in the debate on culture and development because many adopt a very narrow definition of culture. For them culture represents the fine arts, music, dance, painting, poetry etc. For the purpose of social science purposes it is not a useful definition. After all, the way in which a person uses a saw, maintains a car, or behaves on the shop floor is culture too.

The last century has witnessed an unprecedented growth in the world population, giving rise to a multiple increase in intercultural contacts. Economic, demographic and technological developments have brought about major changes in cultures throughout the world and sometimes even their disappearance. The wide-scale, intensive and sometimes aggressive transfer of knowledge, norms and values results in disruption and conflicts. On the other hand growing contacts have given rise to new opportunities and incentives for the creativity of individuals and groups.

The apparently conservative and gradual process of cultural change and diffusion would seem to have been broken down by rapid and radical changes. But not all that is new is regarded and accepted as good everywhere. Resistance to change occurs as a result, especially when the changes come from outside a society or are actually imposed. This may lead to an artificial isolation of the social and cultural unit, but also to aggressive forms of conservatism.

The growing expansion of cultural units, the rapid exchange of cultural elements and as a result the growing uniformity - superficially, at least - is making it increasingly difficult to recognize the cultural identity of a particular group. The need for a cultural identity can be observed not just at an international level but also within societies. More and more subcultures are emerging, explicitly demanding recognition of their individual identity. A particular question which arises on this point is to what extent the official social units or authorities tolerate such subcultures, or whether they obstruct their emergence or development by intervening in their educational activities.

The problem not only leads to political questions on such issues as language, autonomy, social and economic inequality, it also prompts reflection on the choice of curricula, access to the use of media and the choice learning materials etc. What is the minimal group size to warrant the provision of education geared to its particular subculture?

Education

The process of transferring knowledge, norms and values occurs through education. Dutch and German make a distinction between *opvoeding/Erziehung* (upbringing) and *onderwijs/Unterricht* (education). These are often complementary and imperceptibly overlapping processes. Different languages have special terms for specific types of upbringing and knowledge transfer which are not always equivalent. Of all these the English term 'education' best conveys the cultural transfer which is referred to here.

It is, after all, the process of transfer as such which concerns us and not in the first instance the how, when, why and by whom. These are details which are filled in in a particular context given the needs prevailing at the time. The distinction between the comprehensive term 'education' for cultural transfer and the diversity of its manifestations is vital in the debate on the allocation of the roles of the various types of education.

One thing will be clear: education here implies more than what normally occurs in schools or in the formal education system. It also includes what are referred to as non-formal and informal aspects.

Learning, imitating and discovering continue throughout life from birth through adulthood into old age. Because man in the first instance is brought up and taught by members of his own group, education is very much determined by the knowledge, skills, norms and values of the members of the individual group or society at large. They preserve and reproduce them.

In that respect education is fundamentally a conserving process, namely the transfer of the existing culture (see: de Jong 1969:1, and Dubbeldam 1986:2-5). However, this conservatism can be broken by compelling and challenging changes in the natural and social environment as well as by creativity and social psychologically deviant behaviour of individuals which may lead to changes and innovations in the given culture. To what extent these can affect an existing pattern depends on the interplay between the groups norms and individual behaviour but also on (coincidental) circumstances. Often cultural elements appear or disappear gradually and almost imperceptibly. The chance of changes surviving depends also on the tolerance or resistance of the culture bearers to innovations, and the degree to which the new element fits into the existing cultural constellation.

The most elementary upbringing occurs within the family group in which the individual grows up and more broadly in the group of relatives and local people with whom there are close ties. It is here that the fundamental values, norms and behaviourial patterns prevailing in a society are learnt. It is also here that the basic knowledge is acquired which is necessary to be able to function as a person in that specific society.

Diversification

As (the/Western) society became more complex and bigger and was influenced more by other cultures, greater diversity arose in the norms, values and desired patterns of behaviour and in the knowledge needed to be able to function within society. Subcultures also arose, some of whose members had general cultural elements in common but differed in others. The result was a greater diversity in the content and form of knowledge transfer.

Gradually, other forms of education developed outside the total upbringing of the family. Education of this kind is often provided by specialists. The individual learns what is regarded as generally useful knowledge about agriculture, manual skills, religion, arithmetic, reading, writing, etc.

Major differences and contradictions in the various forms of learning can arise as a result of diversification. Some learning processes (such as religious teaching or formal school education) are basically conservative in nature. They are concerned with passing on values, norms and knowledge and thus maintaining these. Others are more innovative - critical of society, geared to change and new skills as in the case in some non-formal types of education and specific training programmes. Some learning processes provide more scope than others for the individual to acquire certain knowledge and behaviour and develop these through observation, creativity and familiarization. The learning goals in some cases are very clear, especially in the case of acquiring specific knowledge or skills, for example of a technical kind.

But they are less clear in other cases. Determining the learning goals becomes a bigger problem if the society is more complex and diverse and if the individual person's future life and work is less predictable. A discrepancy then arises between the breadth of general information and the depth of specialized knowledge.

Questions

Difficult questions now arise, which are hard to answer, as a rule, but which need to be posed nevertheless. What is the minimum knowledge for people to be able to function socially and to provide a useful contribution to the economic development of the community of the country? What is the minimum congruence of norms and values of the members to keep the people together without too many conflicts? In this respect one very specific question is: to what extent do literacy and numeracy constitute the desired minimum? What has been the effect of forty years of literacy programmes? Functional literacy has lent the campaigns a clearer content by the question remain whether we now know what we want.

If the adhere to the principle that cultural transfer takes place through education, in other words that education reflects the culture, what has been the function of literacy? In some cases it has been instrumental in changes, but in other cases the new knowledge has not stuck, because for all kinds of reasons, literacy has not resulted in and has not been accompanied by changes in cultural behaviour towards communication. In many cases people have not been able to use literacy enough, passively, to obtain information, and actively, to express themselves in writing. Why has literacy in some regions been functional and not in others?

Learning can roughly be subdivided as follows:

- Socio-cultural learning situations in which the individual learns through transfer, observation, imitation and dialogue in contact with fellow members of the group. This type is to be found in all formal, non-formal and informal educational situations.
- Specific types of general or vocational education with a certain pre-determined syllabus, usually continuing for several years or more.
- Specific types of education, often called training, aimed at teaching and keeping up to date a certain skill of behaviour.

People may be participating in the three situations simultaneously. Since the experiences and the content within the three situations differ somewhat, inner as well as outer conflicts may arise for the persons involved.

The effects caused by the various learning situations often fail to correspond to the cultural, social or economic reality in which the individuals are later expected to find themselves. The objectives and expectations of all those involved (pupils, teachers, parents, politicians, employers) may differ drastically and give rise to problems.

Because many types of education prepare people for later life, in other words for situations which will arise in the distant future, one may wonder whether such inappropriateness can ever be avoided - the more so if it is impossible to estimate the future requirements of society and specifically of the work situation. On the one hand it is obvious that the various types of education can be complementary in terms of content and timing. An efficient and complementary use of education might bridge the time differences and reduce the inappropriateness. Nevertheless many complaints are still heard that this does not happen.

The question is why. Could it be that the teachers in the various types of education are too little aware of what is going on in the other types in terms of the syllabus, but also in terms of the presentation, the methods and teaching aids? Are teachers insufficiently informed of developments going on elsewhere in the vast education field?

There is yet another highly intriguing question. In the past decades various educationists have attempted to put forward alternatives to the existing education systems, methods and techniques. Despite the enthusiasm and the animosity with which they were received, hence the great publicity they were given, their ideas and proposals have nevertheless had little visible impact on the existing systems. Perhaps they have had an effect at the micro level, insofar as individual teachers or devisers of teaching methods and aids have adopted their ideas within the margins available to them. At any rate, why did wide-scale introduction never take place? Were the systems too conservative after all, so that neither the policy makers nor the parents nor the participants were prepared to adopt their ideas into the official education system? Was it due to opposition from a cultural angle, or because their ideas were insufficiently practical to fit into a preparation for a productive live?

The transfer of information

In socio-cultural learning situations those alien to the group seldom play a conscious, direct role. They do play an indirect role because people can observe and imitate behaviour without there being direct personal contact, for example in daily life in large urban societies, but above all when this is presented through the modern media. So this form of communication can be very important for inter-cultural contacts and for development work. Since many messages still fail to get across or are wrongly interpreted it would be a good idea to find out more about the processes of informal transfer of knowledge and values, interpretation and perception in different cultural contexts.

In the second type of transfer, education, usually in the form of schooling, the external influence within primary education is limited because of fewer interventions. In secondary and tertiary education external influence is considerable, partly because within the subculture of the persons involved contacts exist with other cultures. As a general rule deliberate interventions by outsiders in socio-cultural learning situations are more problematical than in more formal and content-oriented learning situations.

In all interventions including those in the field of education it is important to take the existing cultural pattern into account as well as the effects of social and cultural processes occurring in the given society. This must be done to prevent the newly acquired skills, knowledge and attitudes ending up in a vacuum or clashing with the prevailing and culturally determined pattern of values and norms. It is debatable whether sufficient attention is given to this through evaluation and follow-up.

Although in the case of external interventions it is often said that due consideration is given to the needs felt by the community itself, to the knowledge people already possess and their norms and values, it frequently seems that this only happens if it is convenient to the outsiders. The reason may be that not enough is actually known about the community's needs, its indigenous knowledge, methods of transfer and value patterns. Much of the indigenous knowledge of the past has been lost without even an attempt being made to harness it for the development process. If education is to be more in keeping with the existing (sub)culture, further research and application of the results is required fast. Suggestions in this regards are badly needed.

When one examines the questions and problems surrounding education in developing countries in many cases a lack of knowledge emerges. That is partly due to a lack of researchers, a lack of funds or to political obstacles. It is also partly due to a deficiency in communication. On the one hand it would seem that there is little opportunity for publishing and disseminating information, on the other hand there is insufficient access to documentation. This is a matter which ought to be given more attention.

Productive life

Everyone has to provide for his of her daily needs, food, clothing, accommodation. Over the centuries the range of what is defined as daily needs has been considerably extended. For one's daily needs one requires knowledge of the natural environment. One has to know how to use materials and objects and how to handle them. In many cultures man, animals and objects have their own harmonious place in the universe. Human intervention must be done cautiously for the relationship with the supernatural may not be disturbed.

People have to learn to be productive in the sense that they can produce food and goods but also make an active contribution to a harmonious survival of the community and to good relations with the natural and supernatural environment. A person is therefore not only productive when he or she actually produces something materially, but also when he or she makes a contribution to the life of the community by social or spiritual action.

A social component is explicitly present in the process of producing goods from the beginning to the end. It is not just producing which is important but also the way in which it is done. In the smaller, more traditional communities, the connection between culture and nature, between the social and the material in the philosophy of that culture, in thinking and experience, was much more apparent than in our contemporary, bigger and at the same time looser human societies.

The norms, values and attitudes within a culture towards work not only affect the way people behave, even if they work in the modern sector, but by the same token the objectives, form and content of the training courses. Attitudes towards concepts such as time, efficiency, cost, profit, hierarchy, responsibility, social behaviour at work, etc. determine people's productivity perhaps just as much as their job skills. It would be interesting to know how often and to what extent these aspects form part of the training courses. A specific question is whether it is possible for people to have two sets of values and attitudes: one for work and one for elsewhere.

In traditional communities the elements of knowledge required for work and production were learnt in conjunction. As the knowledge present in society expanded and became more specialistic, making the interconnections more tenuous, a greater demand arose for forms of education specifically geared to work and production. People were less and less able to learn what they required for work and production and even for social behaviour at home, i.e. in the family context, by means of informal contacts and observations and as part of a total 'package'.

For a long time (in western history) people who wanted to learn a trade became apprenticed to a craftsman who taught them on the job, either in return for remuneration in the form of work or cash or otherwise. Later on schools which trained for particular trades or jobs acquired a more important role because expanding knowledge and technology required people to know more before they went out to work or functioned in society in general. Such schools taught a combination of theory and practice.

Vocational training

For many years now we have been hearing that these vocational schools are no longer adequate. The reasons for this vary. It is alleged that what has been learnt cannot be used at work because it is either too modern, too old-fashioned or too theoretical. No work can be found for the school-leavers. Moreover, new learning needs emerged only later during working life as a result of mechanisation, computerization and social changes.
A demand arose for a different kind of vocational education to suit certain situations. The result was the organization of many new types of education of varying duration: in-service training courses, evening classes etc. There

also came about a renewed interest in the apprenticeship system and occupational training specifically for those leaving primary and general secondary school.

Many types of education are geared to a productive life. A first category constitutes forms of general education within which specific training and modest production may be accorded a place. But if the latter is provided in a school at the expense of, or seemingly at the expense of, those subjects which are regarded as the minimum learning requirement, parents are often opposed. Frequently, such additional activities carry no weight in examinations and certificates.

The result is that subjects of this kind (vegetable growing, cookery, driving lessons, woodwork, expressive subjects, etc.) are not always taken equally seriously, either by teachers or pupils. One might wonder whether there is any sense in this arrangement. Perhaps diversification of education at the secondary level has more prospects if a certain group of subjects (horticulture, metal work, commerce. etc.) dominates the character of the total curriculum. Diversification in primary school would seem to be premature, although an attempt is made towards it. Tertiary education mainly concentrates on specialist subjects, hence can be left out of consideration.

A second category comprises numerous short courses geared to teaching specific skills, and usually of a non-formal type. Normally there is little scope in the curriculum for general knowledge or for production. Learning is confined to theory and the ability to use certain instruments and materials. Perhaps some more attention might be paid to knowledge of the context and production.

A third category covers training either in certain skills or in more general knowledge of the trade. Such types of education are to be found more frequently in larger companies or institutions than in smaller ones because in the latter it is more difficult to make up a group of sufficient size and to release staff. It is for this reason that education of this type will be encountered less frequently in rural areas in developing countries.

Final remarks

The discussion of the pros and cons of the various types of vocational training is by no means over. On the whole one can say it depends on the circumstances which type is best, both socially and individually, but in practical terms that does not carry far. What is more important is to ask how to determine which mix is best in a certain situation and how to achieve a greater effect by using the various types in a complementary way

(EPTA, 1985). Various aspects will have to be weighed, such as available time, the immediate as well as the longer-term result, for the person involved and the organization in which the person is working.

In all this it should be remembered that the economic position of the developing countries in the last few years had continually deteriorated. The question is therefore whether education can do something about this.

A number of questions will have to be answered in the case of education geared to a productive live, more so than for general education. On the one hand: how adequate is the co-ordination of school programmes to the needs of a highly varied labour market? Is there sufficient attention for insight, understanding of phenomena and processes, analytical capacity, attitudes towards the material, work, time etc. alongside specific technical skills?

Training programmes will have to create space for background knowledge, the wider context, grasp of situations, applications and the practical social and economic aspects. Programmes ought to be set up only in the needs of potential pupils have been sufficiently gauged and if these have been taken into account in the curriculum.

Alternative programmes may be the answer to specific needs for certain people and groups at certain times. However, it seems that such alternatives require a higher input than formal or even non-formal education, in the sense of additional dedication on the part of the organizers, extra expense, efforts of pupils and sympathizers. A big problem with alternative approaches in the transition from the pilot project stage to a wider application. At that moment growing expenses and a loss of effectiveness because of reduced effort and dedication start to play a role. What can be done about that remains a fundamental question.

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Section I

Education, Culture and Development

1.

Educational Development: the Challenge for Bridging the Gap

Aklilu Habte

What is the current state of educational advancement throughout the world? Although over the past 25 years dramatic achievements have been made in enrolment and input increases throughout the developing world, the author draws the attention to a widening knowledge gap between the wealthy and poorest economies. Disparities are increasing with respect to such aspects as enrolment and drop-out rates, per capita expenditure, access to educational technology and student achievement.

The paper calls for actions to close this gap. These actions include increased and better managed financial support for education, a strengthening of the management of the educational enterprise, and more emphasis on research and research capacity building.

The last 25 years have featured a valuable amount of research and widespread dissemination of information on educational development in the Third World. What stands out invariably in the context of educational development is the concept of culture. There can be no doubt that the success of new educational initiatives will depend greatly on the degree to which they fit the culture in which they are implemented. This fit is crucial on many levels. In a broad sense we know that culture affects education in fundamental ways by setting the mood of a nation. At the school level, appreciation for culture is vital. The importance of decisions regarding curriculum development, the language of instruction, and respect for local tradition and calendars cannot be underestimated in the planning and implementation of educational programmes. In this respect the inclusion of the topic 'The Relationship between Education and Culture' as one of the three themes for this symposium is a welcome initiative.

The work being carried out by UNESCO and other institutions on indigenous languages and cultural heritage has played an important role in helping to raise the profile of cultural studies. And the recognition by the Nobel Prize Committee of the literary contributions of Third World authors, resulting in Nigeria's Wole Soyinka being awarded, was an important milestone. Unfortunately, many valuable works on the cultures of developing nations have not received due attention.

Before coming to the central issues of this paper, let me make some brief remarks about the relationship between education and productive life. While this is a topic of vital importance to future development efforts, it is one that we do not yet know enough about and one that continues to raise many basic questions. For example, we need to know more about what basic skills must be imparted to all children to enable them to live productive lives; what types of vocational/technical training should be provided; who should provide this training; and what relationship, if any, such training should have with the formal education systems. These questions and many others will need to be considered in the course of this conference.

The links between education, culture, and productive life are strong. First, as culture reflects a nation's state of mind, it provides the content for education. And education, of course, plays a central role in increasing the productivity of a nation's citizenry. With these presumably sketchy and hurried remarks, I would like to focus on the state of educational advancement in developing countries since the early 1960s. This seems like a particularly appropriate point from which to measure progress, since it was both the time of the UNESCO Global Conference, as well as the period in which CESO was established.

It is important to take stock of just how far many countries have come, to recognize the real progress made during these 25 or so years, assess the current state of educational advancement throughout the world and sketch the dimensions of what I fear to be a widening 'knowledge gap' between the developed and the developing world.

This will be followed by some suggestions for future initiatives to strengthen the provision of education in order to close that gap.

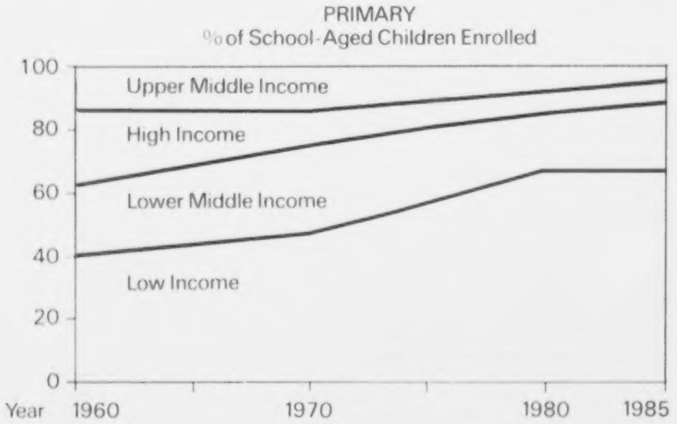
In discussing all this, it is important to make one reservation: that although my remarks are based largely on broad generalizations about the state of educational advancement, it should not be forgotten that there are marked variations and discrepancies among regions and countries. And indeed within the same country. I am only too aware of the dangers of such generalizations. Their usefulness is in providing a broad picture of the educational scene in developing countries.

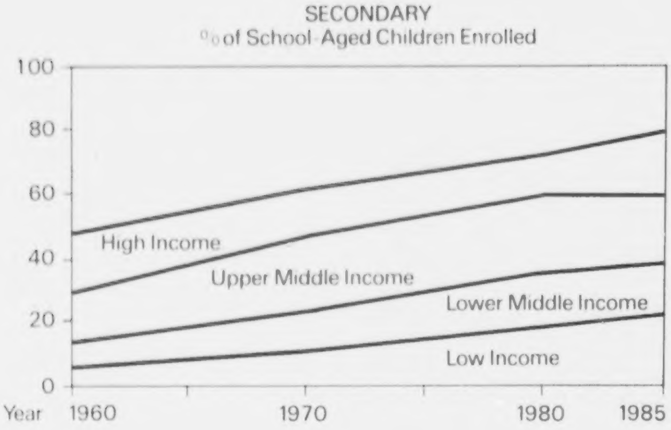
General achievements

The past 25 years have brought to the developing world some major achievements. First, consider the dramatic rise in enrolment rates at all levels of the educational system:

1. in low-income countries - which refers to those countries in which annual GNP per capita is below $ 400 - primary school enrolment rates have grown from 145 million in 1960 to 270 million in 1984. This represents an average annual growth of 6.6% in the median country between 1960 and 1980;
2. during this same period, the percentage of girls in primary school increased from 30% to 40% in the median low-income country;
3. in addition, the number of primary schools grew from 1.1 million to over 1.6 million between 1960 and 1984, an increase of over 40%;
4. at the secondary level low-income countries showed even more dramatic enrolment gains. Between 1960 and 1984 secondary enrolment rates grew from 27 million to 100 million. In the median country that translated into and average annual growth of nearly 12% between 1960 and 1980. And at this level too, the percentage of girls rose. While only 20% of girls were enroled in 1960, the rate increased to 28% by 1984.
5. if we look at enrolment growth in tertiary colleges and universities in this same set of countries the picture is similar: increase from 2 million in 1960 to 8.5 million in 1984. Throughout the period the average annual rate of growth in these institutions was nearly 10%. In addition, the percentage of women rose from 14% in 1960 to 24% by 1984.

Figure 1. *Primary and secondary school enrolment rates, 1960-1985*





SECONDARY
% of School-Aged Children Enrolled

It is also instructive to consider the increased inputs that have been invested in the educational process in the poorest countries:

1. the number of primary school teachers has more than doubled from under 4 million to over 8 million;
2. at the same time, secondary school teachers increased their ranks from less than 1.5 million to over 3 million;
3. impressive progress has also been made in terms of the increased level of public expenditure devoted to education. In constant dollar terms, total public expenditures on education in the low-income countries rose from $ 6.3 billion to $ 15.5 billion from 1970 to 1984;
4. the percentage of national income spent on public education has also risen consistently. For all developing countries, this figure increased from 2.9% to 4% between 1970 and 1983. This compares to growth in the industrialized countries from 5.6 %to 6.1% during the same period.

If we consider the case of sub-Saharan Africa, the achievements of these years are all the more impressive, given the very low level of educational development that existed in this part of the world at the time when most of these nations gained their independence. Some examples:

1. between 1960 and 1983 the number of students enroled in African institutions at all levels quintupled to about 63 million students. Enrolment rates increased by 9% annually between 1970 and 1980, which was double the rate in Asia and triple that in Latin America;

2. primary enrolment rates increased most in absolute terms, growing from approximately 12 million pupils in 1960 to over 51 million in 1983. The gross primary enrolment ratio rose from 36% to 75% over this period;
3. tertiary enrolment rates increased most in relative terms, especially between 1960 and 1970. While there were only about 21,000 university students (or one in 500 of the age group) at the start of this period, by 1983 enrolment rates were up to 437,000 (or seven in 500);
4. the numbers of schools built and teachers trained to accommodate the additional students throughout the region were also impressive accomplishments.
   - Between 1960 and 1983 the number of primary schools grew from about 73,000 to roughly 162,000.
   - number of primary teachers also rose from 310,000 to more than 1.3 million.
   - number of teachers employed at the secondary level increased eightfold, from about 46,000 to 373,000 during these years.
   - And at the tertiary level, the number of institutions has more than tripled since 1960 and today exceeds 80;
5. the growth in public expenditure on education in sub-Saharan Africa has also been dramatic. In 1970 the 39 countries of the region allocated about $ 3.8 billion of public domestic expenditure to the education sector. By 1975 this figure has reached $ 6.3 billion, up 66% over 1970. By 1980 it was nearly $ 10 billion, up another 58%.

From this listing of achievements, we can draw several general conclusions. First, there has been a dramatic increase in educational access throughout the developing world. Millions of children who were formerly unserved by the educational system have now received at least basic education. Second, this has meant an increasingly literate population: since 1970 the percentage of illiterates in the world has fallen from 33% to 27% in 1985. And third, there has been a steady gain in estimated mean years of education throughout the developing world - particularly for girls. This indicates that substantial achievements have been made by developing country education sectors. And these gains are especially significant considering the high rates of population growth and child survival during these years.

Where are we now: the widening knowledge gap

Although the achievements described above were indeed impressive, unfortunately they tell only half the story. It is certainly true that schools have been built, teachers have been trained, curricula developed, and educational systems established. But sadly, many of the gains won between 1960 and 1980 have begun to erode during the present decade.

At the same time, the world now finds itself in the midst of a revolution in information, biotechnology, and new materials. In this fast-changing environment, the role of the educational system in every country has become directly linked to the way that country participates in the international economy. As technology grows increasingly sophisticated, more and better education - especially maths and science education - is required. More than ever, an educated population is needed to develop and apply emerging technologies to meet development needs.

Yet it is now, when more and better education is needed, that much of the world's population is being left behind. Although certain countries have made dramatic progress and are catching up, many of the poorest countries are not. Indeed, the knowledge gap between the wealthy and the poorest economies appears to be growing, which refers to the disparity in the capability of countries or groups to acquire the knowledge that will allow them to participate in the gains of expanding technological innovation and new production processes.

An examination of school enrolment levels and school quality across countries and in time is one way to understand the changing dimensions of the knowledge gap.

(a) First, the disparity in enrolments ratios between the lowest-income countries, and other countries widened between 1980 and 1985. In high- and middle-income countries the gross enrolment ratios were at or above 100% by 1985. In the lowest-income countries, although the primary enrolment ratio rose from 38% in 1960 to 65% in 1980, it remained almost constant after 1980. And by 1985, 100 million school-age children in developing countries were not in school. About 70% of these out-of-school children were in the lowest income countries, with another 17% in lower middle-income countries. South-Asian countries (India, Pakistan, and Bangladesh) accounted for 45% of the out-of-school primary level children, while sub-Saharan Africa accounted for 30%. Most were in rural areas and about 60% of these children were girls.

Table 1 illuminates the magnitude of the problem, proposing two scenarios for enrolment growth between 1985 and 2000 for the ten developing countries with the largest populations of out-of-school children in 1985. In that year these ten countries together comprised 31% of all children between the ages of six and eleven years of age. But they accounted for 61% of the world's total out-of-school population in that age group.

To reduce the number of out-of-school children in these countries, enrolment growth will have to outstrip the population increase in absolute terms. For many poor countries, this is a very tall order.

Table 1. *Out-of-school children in ten low- and lower-middle income countries*

(in millions)

	1985	2000	
	(actual)	2% enrolment growth	5% enrolment growth
		(projected)	
Total out-of-school	87 (21%*)	129 (125%*)	52 (10%*)
Selected countries:			
India	22.5 (25%)	12.6 (12%)	0.0 (0%)
Pakistan	11.0 (70%)	19.0 (76%)	13.0 (52%)
Bangladesh	6.7 (45%)	6.1 (35%)	0.0 (0%)
Ethiopia	5.5 (81%)	9.7 (87%)	7.9 (71%)
Nigeria	4.1 (26%)	14.6 (50%)	3.0 (10%)
Afghanistan	2.7 (85%)	4.8 (89%)	4.4 (81%)
Sudan	2.3 (68%)	4.4 (77%)	3.0 (53%)
Egypt	2.3 (33%)	2.8 (30%)	0.0 (0%)
Tanzania	2.0 (46%)	4.9 (64%)	2.5 (32%)
Uganda	1.4 (49%)	2.9 (60%)	1.4 (29%)

* Numbers in parentheses refer to out-of-school children as a percentage of the population of primary school-age (6 to 11 years).

The table evidently projects an enrolment growth of 2% and 5%. Both of these scenarios assume a population growth rate in each country based on World Bank projections. For those countries that are experiencing or are expected to experience significant declines in fertility - such as India, Bangladesh and Egypt - 2% growth in primary school enrolment rates until the year 2000 will be sufficient to reduce the proportion of the school-age population that is not in school.

In the other countries, this rate on enrolment growth will not be adequate. Unless population growth slows considerably, sustaining even a 5% growth rate will not close the primary enrolment gap. In five of the *countries - Tanzania*, Pakistan, Sudan, Afghanistan, and Ethiopia - the number of out-of-school children would increase even with 5% growth in enrolment.

The enrolment gap between the lower- and higher-income countries is even more dramatic at the higher levels of education. Gross enrolment rates at secondary level increased most rapidly in the highest income countries, to 85% in 1985. This compares with rates of 64% in the upper middle-income countries, 41% in the lower middle-income countries, and a mere 19% in the low-income countries. And at the tertiary college and university level, in 1985 the rate in the highest income countries was 32%. This compares with 17% in the high middle economies, 13% in the low-middle, and 2% in the low-income countries. These differences in enrolment rates at secondary and tertiary levels might make a good deal of sense in terms of different production structures, the demand for skills, and the pay-off to various levels of education. But at the same time, they also mean that the poorest countries are less able to take advantage of knowledge-based innovations in all economic sectors.

Also distressing is the gap in terms of female enrolment rates. Although the growth in enrolment rates mentioned earlier has certainly benefited women as well as males, the educational participation rates among women remain very low. In 1985, girls represented 40% of total primary enrolment in low-income countries, compared with 49% in middle- and higher-income countries. But this proportion drops off quickly at the secondary and tertiary level. Whereas girls make up nearly 50% of secondary enrolment in the middle- and higher-income economies, they represent only 28% in the low-income countries. And at tertiary level the disparity is all the more evident.

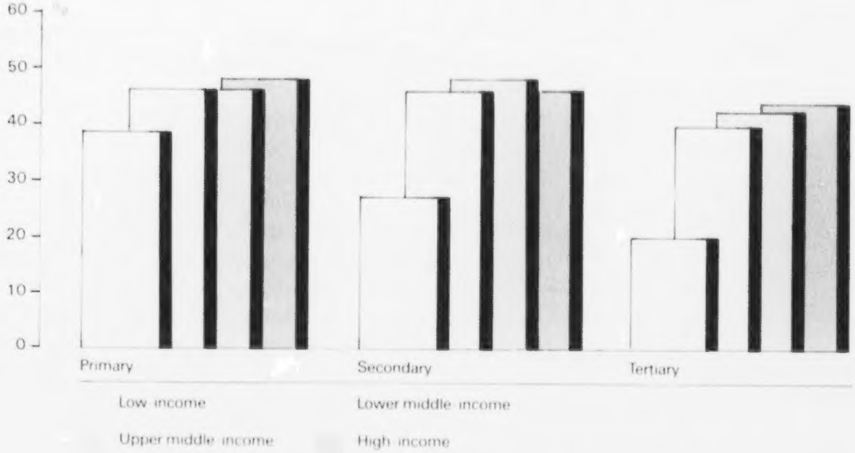
Figure 2 reveals the dramatic gap in the proportion of women as a percentage of total enrolment at all three levels between low-income countries as compared with middle- and high-income countries.

(b) Then there is the problem of educational quality and low academic achievement. One measure of educational quality, although an imperfect one, is per pupil expenditure. In 1960 the OECD countries spent 14 times more per student than low-income developing countries. And by 1980 the industrial nations were spending 50 times more per student than the low-income countries. One aspect of this problem is the marked deterioration of expenditure on education in much of the developing world. In constant dollars, public recurrent expenditure per primary student in the median low-income country fell from $44 to $30 between 1975 and 1984.

The situation is the same for per pupil expenditures at the secondary level: the amount dropped from $191 to $112 during this nine year period.

When these declining per pupil expenditures are matched against the impressive enrolment growth of the 1960s and 70s, it seems safe to conclude that the managerial, professional, and financial resources of many developing countries have been stretched beyond the limits of minimal effectiveness. The results in many schools throughout the developing world is that children and youth do not seem to be learning very much.

Figure 2. *Females as a percentage of total enrolment, 1984*



Several international studies have compared the differences in student achievement across many countries. These provide evidence for what is perhaps the most serious problem facing schools in developing countries: their apparent inability to teach students effectively. It is common knowledge that these students show that students from industrialized countries outdo students from developing countries on standardized achievement tests in reading, mathematics and science. A few examples:

One 1983 study, which was conducted by Heyneman and Loxley, compared the achievement of science students in 15 low- and middle-income developing countries and 14 developed countries. Not only did students from the developing countries perform worse than their counterparts from the developed world. But most startling was the finding that the mean score of students from the developing countries was in the bottom 5-10% of student scores from the developed countries.

Similar results were found by the International Association for the Evaluation of Educational Achievement (IEA) in a 1981 comparison of mathematics achievement. The IEA tested students from 18 countries, including the developing countries of Nigeria, Swaziland, and Thailand. Students from those three countries achieved the lowest average scores.

The African students answered fewer than one-third of the test items correctly, while the Thai students answered 42% correctly. Students from the ten European countries answered 50% of the test questions correctly.

Another example comes from a 1986 study supported by the World Bank. A mathematics test that is routinely administered to all incoming fifth-grade students in France was given to fifth-graders in the Central African Republic. Both the curriculum and medium of instruction in the CAR are French. Although the CAR students came from schools in the capital city, which we might expect to be better-endowed than other schools in the country, their responses on the 40 test items were extremely poor. Not only did the French students score consistently higher than their African counterparts, but the African students did no better than if they had guessed at all the answers.

What this means is that students in developing countries are getting not only fewer years of education, but are learning less in each of those years than students in higher-income countries. This is partly reflected in high repetition rates in primary and secondary schools. But high repetition rates do not measure the fact that even those who go straight through their school years are learning less in terms of language skills, mathematics, and science in low- and most middle-income countries than in the newly-industrialized and industrialized countries. It is clear that the poor quality schooling being provided in many developing countries has serious implications for a their future ability to compete economically.

(c) The gap between the developing and the developed countries is also unmistakable in a third area, that of the availability of skills for productive employment. In the industrialized nations, scientific and technological change is transforming production processes and many occupations. The demand for training is increasing in fields such as computer science, robotics, laser technology, and biochemistry. The need for more people with scientific knowledge and technical skills is growing rapidly. Both the public and private sectors are investing heavily in the training and upgrading of workers in the manufacturing and service sectors.

In middle-income developing countries we can observe similar trends in terms of upgrading the labour force. In most of these countries an adequate supply of skilled workers at the craft level has already been established. But shortages of people with higher-level skills, such as technicians and engineers, persist. In these countries the critical development priorities are to make labour more productive and to become more competitive internationally by adapting and applying new technologies and improved management strategies. This will require devoting greater attention to expanding and improving secondary and university education.

In low-income countries the priority remains to provide basic education. In these countries the industrial bases are weak, production processes are less well-developed and rely more on skilled workers than on technology. Skilled workers are often not used efficiently due to broader macro-economic constraints and imperfect labour markets. Enterprises tend to be small and inefficient. In most of the poorest countries management is weak and people with high-level skills are in short supply. In addition, training systems are generally fragmented and oriented to the modern sector. Training for small-scale industries and the informal sector, where the bulk of productive employment opportunities can be found, has been neglected. As was stated in the introduction, this is one area where a great deal more research will need to be done.

(d) The developing countries have not yet begun to exploit educational technology to improve the efficacy and quality of the teaching and learning processes. In this regard it is increasingly clear that the industrialized world is moving ahead at an ever more rapid pace, leaving the developing world further behind in its attempt to impart the essential knowledge and skills its people will need to live productive lives.

More areas could, of course, be covered, and more examples cited but I hope that the above discussion provides a visible picture of the changing dimensions of the knowledge gap. I also hope it is abundantly clear why I am putting the emphasis on knowledge. As Alfred Marshall wrote, "Knowledge is our most powerful engine of production, it enables us to subdue nature and satisfy our wants".

The context in which the knowledge gap is widening concerns two factors largely external to the education system that have an inordinate influence on the development of education throughout the Third World.

The first is the demographic challenge. Between 1970 and 1980, while the world's population was growing at an average annual rate of 1.9%, comparable rates in the developing world were around 2.4%. In sub-Saharan Africa the average annual rate of growth was 2.9% and between 1980 and the end of the century is expected to increase to 3.2%.

Rapid population growth creates serious problems for education. For the growth of educational places to keep pace with the growth of school-age children, more schools, teachers, books, and other inputs are required each year. The situation is complicated further by the fact that as populations grow, the number of school-age children increases even more rapidly than the number of working adults. This means the burden of supporting an expanded education system falls on an adult population that is shrinking as a proportion of the overall population. To give an example, sub-Saharan Africa today has the youngest population of any region in the world. One in three persons is of primary or secondary school age, as compared with just one in five persons in Latin America and in Asia, and one in six persons in the industrial countries. It is clear that the dramatic population growth in much of the Third World sharply constrains the options open to education policy makers.

The second element that threatens the development of education is the continuing economic crisis that began in the late 1970s and accelerated after 1980. The world economic situation continues to be characterized by the collapse of commodity prices, the reduction in net resource flows to the developing countries, instability in exchange rates, and rising protectionism, which have hurt growth-oriented development efforts. Many developing countries have been severely disadvantaged by deteriorating terms of trade caused by a combination of declining agricultural prices and rising energy prices, as well as by a range of natural disasters. At the same time, the investment rate in many of these countries has fallen. In Africa it fell from more than 18% of income in the 1970s to less than 15% in 1983. This situation poses a serious threat to the long-term productive capacity of much of the developing world.

What to do to close the gap?

If this widening gap it to be closed, a number of actions will need to be taken simultaneously.

(a) Increased financial support to the educational sector is vital. This can be accomplished in two ways: through more efficient use of existing resources, and by diversifying sources of educational finance.

In the current constrained economic environment in which we must operate, every effort must be made to use limited resources more wisely. This implies containing the economic costs per student at all levels of education. Reducing construction costs and raising utilization rates for physical facilities offer potential for reducing unit capital costs. At the basic education level, in some countries there may be pay-offers to purging from the educational payrolls so-called ghost teachers - those who are not actually assigned to classroom duties or are not fulfilling their assigned duties. In many countries reductions should be pursued in the often higher numbers of non-teaching staff. This is a particular problem in Africa at the secondary, and especially at the tertiary levels. Probably the most fruitful means of reducing unit costs is through more intensive use of teaching staff, as long as the increase in teaching time is greater than the increase in salaries needed to motivate and compensate teachers for their greater effort.

Beyond savings to be found through increased efficiency, educational finance must be diversified. Until now educational resources in developing countries have flowed almost exclusively from government budgets. Unfortunately, public coffers are not growing, and can no longer be relied upon as the sole source of support. This means that public support must be supplemented by other sources of finance.

Financing options must be broadened to include increased support from communities and, in some instances, from families. At the secondary and tertiary levels in particular there seems to be scope for increased cost-sharing between governments and beneficiaries of educational services. This would include making students and their families more responsible for the costs of food, lodging, and other living expenses unrelated to instruction. There is little if any justification for financing these costs out of the public budget. This is especially true in poor countries where only a minority - and often a relatively well-to-do minority - is enroled at secondary and tertiary levels.

Increased cost-sharing can also be achieved by encouraging the establishment of privately-owned and privately-financed institutions of secondary and higher education. This would also include relaxing regulations that currently constrain the operation of such institutions. By encouraging and facilitating the efforts of local groups or NGO's to construct, finance, and operate schools, especially at the primary and secondary levels, developing countries should be able to reap the benefits of more resources for educations. These efforts should also lead to better management of education in response to local needs.

Increased support for education must also be forthcoming from the international donor community. And this subject needs to take into account the critical contribution of education to development as a basic human need, as a means of meeting other basic needs, and as an activity that sustains and accelerates overall development, in addition to being a basic right, an end in itself and indeed an intrinsic part of life and development. Much has been written on this. Not to heed this request could be myopic in the short run and disastrous in the long.

(b) To help the knowledge gap, increased attention must be given to the strengthening of management of the educational enterprise. Although the educational process is a major bureaucratic undertaking, the management of the system tends to be weak in many developing countries. This situation is extremely troubling in the face of a growing body of research that suggests that school management can play an important role in boosting student achievement. In particular, recent research suggests that:

1. headmaster education and experience have a significant positive effect on pupil achievement;
2. students perform better in schools with principals who had attended more training courses;
3. student achievement is strongly associated with headmasters' salary and teaching experience;
4. there is a significant relationship between student achievement and headmaster post-secondary education.

It would be useful to have additional studies in different educational systems, especially in more low-income countries, directed at these areas.

We know that well-managed, effective schools share several characteristics: they display an orderly environment, emphasize academic achievement, set high expectations for student achievement, and are run by teachers or principals who work very hard to teach effectively and encourage pupils to learn.

Unfortunately, few schools in developing countries display these features. We need to know more about why that is the case and what low-cost strategies can be employed to make schools more effective and help them to be better-managed. This is an area in which the World Bank is currently undertaking a case study approach to learn more about how effective schools in low- and middle-income countries have come to be so. Clearly more attention must be paid to providing training for principals and headmasters in an effort to strengthen school management.

At the same time, more attention needs to be directed at improving the working conditions faced by teachers and others involved in the educational system. This includes offering reasonable salaries so that teachers will not have an economic incentive to work at other activities in order to survive. It also includes the provision of minimal classroom inputs - such as basic instructional materials - to enhance both the teaching and learning processes. It would also entail a strengthened system of support, both from the senior teachers and school managers at the school level, as well as from educational 'inspectors' from the district or regional educations office. Here the idea is to provide support, answer questions, and help to resolve the problem teachers confront daily in their classrooms. Through the enhancement of basic working conditions it is likely that teachers will be better able to do the jobs they are employed to do.

(c) Much more emphasis needs to be given to research and research capacity building. The importance of research in the development process has been demonstrated in the agricultural sector. There the world's intellectual resources were able to make a significant contribution to the broad-based effort that ultimately led to the creation of the Green Revolution. Unfortunately, there has not yet been a comparable effort in the education sector.

In particular, it is urgent that greater attention be given to research relating to support for primary and secondary education. As concerns about the quality of education mount, we need to pay increasing attention to issues related to curriculum, learning processes, and pedagogical aspects in an effort to strengthen educational achievement. Another important area for further research would be follow - up studies to those conducted by Lau and Jamison regarding the relationship between education and economic growth. And as was mentioned earlier, research into the links between education and culture, and studies focused on how to provide our youth with the basic skills required for productive life demand further study.

We also need to focus our research on:

1. Effective schools. What are the characteristics of schools that encourage learning?
2. Student achievement. What approaches and instruments need to be provided and developed to asses student achievement?
3. Girls' access to schooling. It has been observed that enrolment of girls lags substantially behind that of boys. The explanation for this in broad terms anecdotal and inconclusive. What are the social, cultural, economic and educational factors that affect the schooling of girls? What remedies need to be prescribed?
4. Educational technology. How could we encourage the use of a wide range of technologies for improving the quality and availability of education and training? It would seem that more research and experience are needed on the applicability and sustainability of proven

technologies (e.g. radio) and the effectiveness of newer technologies (such as interactive discs in developing countries).

On a related topic, it seems wise to argue for giving greater attention to building the capacity to carry out educational research in the developing world. In the past there have not always been trained people to take on this work. Today, however, things are different. The trained people are there, and we must invest heavily in them to produce the required research.

Bridging the gap is admittedly a complex and difficult undertaking. There is no single prescription for all ailments. It has to be tried on a case by case basis. Difficult as it might appear, however, we have behind us more than 25 years' experience of successes and failures. And there is no doubt that in this web of development experience, education is emerging as a crucial factor, whether we are talking of nation-building, agriculture production, nutrition, health, population or employment. In fact, we should heed the profound prophecy of Thomas Jefferson who wrote, 'If a nation expects to be ignorant and free it expects what never was and never will be' (.....). Indeed liberty, democracy, individual freedom remain empty words if not backed by the education of citizens, of all citizens worldwide. Our challenge is to mount collectively the will and devise the means to effect it. That is why we observe developing countries devoting a big proportion of their national budget to education. But in further enhancing its quality, extending its reach, and improving its efficacy, remains an unmet demand, a continuing challenge to research, researchers, and research institutions.

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2.

Education, Culture and Productive Life: Taking a Problem Orientation

Eileen Kane

Some concepts from the anthropological literature are examined for their applicability to a better understanding of education and productive life. The concept of cultural premises as a motivating force in people's decision-making, and the dangers of taking a problem versus programme approach to development are explored, with examples from two case studies in Zambia and Ghana.

People in the Western world have the 18th and 19th century Enlightenment philosophers to thank for the idea which bring us all here today: the belief that the scientific method is the surest path to effective knowledge; and that this knowledge can and should be used to ameliorate human suffering and improve the condition of humankind. Unfortunately, other elements of the Western intellectual tradition are with us, as well: the growing 'professionalization' of knowledge and its increasing compartmentalization, so that human affairs have been fragmented into discrete modules, each of which is the domain of a particular kind of 'expert'. These modules, in turn, become the bases of 'programmes'. The fact that ordinary humans live their lives as 'wholes', with needs and wants which reflect a messy disregard for academic, bureaucratic and programme boundaries, is one of the themes of this paper. A second is that sometimes, in using our 'effective' knowledge to ameliorate human suffering, we misunderstand 'culture' and accidentally take a lot of the good out of people's lives. The last, and most important, is that people can become their own experts, with all the power which that entails. This paper draws upon two studies made recently in Zambia and Ghana for the International Labour Organization and the Irish government (Kane 1990 a and b).

In the first project, in Zambia, information was sought on the participation of women in formal 'mainstream' technical vocational education and training for work in modern, urban-based formal sector trade and industries, parastatals and government. Of particular interest were the questions: 'What constraints do women face in enroling and completing courses? What kinds of occupations are women being trained for, and what kinds do they enter?' It soon became obvious that the economic situation in Zambia and the formal educational levels of most adult Zambian women are such that their future, in the short term at least, lies in the informal sector, and what training they are getting is more likely to be non-formal and 'feminine appropriate'. Therefore, the second study, in Ghana, placed a greater emphasis upon non-formal courses and the informal sector.

Zambia

The Zambian economy, which was based heavily on copper mining until the early 1970s, has been shifting to a greater emphasis upon agricultural self-reliance and export manufacturing; and because labour force growth exceeds the ability of the formal sector to generate additional employment, to a greater dependence on the informal sector[1] as a major source of employment in future. While the entire Zambian work force has been affected in the last fifteen years or so, the more economically vulnerable sectors of the population, such as school-leavers and women, are becoming increasingly marginalized. Today, although it has been estimated that 70-80% of women are economically active (Bardouille 1986), only 7.6% of those employed in the formal sector are women (Kelly 1987: A116). Women are found in formal sector agriculture and a small number of activities which are basically extensions of the domestic or low-tech traditional economy, in lower-paid lower echelon positions, and in 'community, social and personal services'. They also have high unemployment rates. Over 50% of working females have no formal education; the comparable figure for males is 25%.

Women are currently in a closed loop of negative gender socialization, poor school performance, incomplete higher education, restricted training opportunities/selections, and narrow occupational niches. The Zambian government has lowered secondary school entrance requirements for girls, thus creating a sector of educated women. This interjection, however, has not broken the loop. Most women are not participating in formal vocational education and training or indeed in any post-secondary education in the first instance for the same reasons that most men are not: there are not enough places, regardless of sex. In 1986, for example, only about three per cent of all school leavers went into formal courses.

Women are under-represented in formal vocational educational and training programmes because they do not have enough years of formal education to qualify for admission to most courses. Girls have, on average, fewer years of formal education than boys; only one in two students completing secondary school is a girl. Among the reasons for this are the following:

1. Girls fail more frequently and on average do worse than boys on every examination at primary or secondary level except for English literature in the secondary school leaving examination; and
2. Socio-cultural factors such as low expectations of teachers and parents, greater emphasis on education of boys when financial constraints are operative, and the official policy of expelling pregnant school girls, all act to reduce performance or move them out of the system.

Most women in formal vocational education and training, and again, in any type of third-level education, are restricted to or choose certain 'feminine appropriate' courses because:

1. They have already pre-selected their options by taking 'soft' subjects in secondary school; and have performed less well than boys on 'hard' subjects such as mathematics and sciences;
2. They were not aware of the options open to them even with their limited qualifications;
3. Most women wish to do the courses they are doing. This is presumably because of their socialization. Sara Longwe (1986: 11), a Zambian analyst, has said, "(there is) not always a sufficient sense of the extent to which women in Zambia accept their lot, as part of the natural order of things".

Women's work loads, timetables, domestic responsibilities, access to transport and control over money and decision-making are such that the format, venue, costs, etc., of formal vocational programmes would have to be radically restructured if women were to participate. This is particularly true of married women, although single women also have domestic responsibilities which men do not have.

Most women attending relatively structured non-formal courses are an educational or financial elite, or both. Well-organized, non-formal courses usually have prohibitive time, cost or transport requirements or are based on an assumption of autonomy which most women do not have. Non-formal courses, which are not usually as well-funded as formal ones, lack equipment, staff, and the ability to provide programmes on a regular basis. Nonetheless, it is these kinds of courses, with their flexibility and capacity for targeting and responding to changing situations and the 'unorthodox' training requirements of ordinary women, which may offer the most hope.

Ghana

In the 1950s and early 1960s, Ghana was a model in Sub-Saharan Africa in a number of respects: high per capita income, good infrastructure, and an educational system which has been described as the best in Africa (Younger 1988). Today, Ghana is a model case again: this time as an example of the supposed efficacy of a major economic 'adjustment strategy' encompassing a restructuring of economic policy and stringent economic reforms. The World Bank, the IMF and various independent analysts such as Ewusi (1988) have monitored progress to date and predicted that, with continued Ghanaian government commitment, the economy will recover, although it may take many years.

What happened in the fifteen years in between these two model scenarios is well documented: in the early 1980s, the economy nearly came to a halt. Inadequate economic policies compounded a number of external factors such as oil price rises, the rise in world interest rates, and a collapse of primary commodity prices. Droughts and the repatriation of over a million workers from Nigeria in the early 1980s compounded the situation. One of the consequences of the economically disastrous situation was that the government became the residual employer; at the same time, large numbers of professional and skilled workers emigrated, with ruinous consequences for a number of sectors including education, which lost 10,000 Ministry of Education staff and 13% of all teacher in 1984 (Younger 1988).

Ghanaian women form over one-half the economically active population of their country and over half the employed, as 'working proprietors', sales workers, or food and beverage processors, reflecting the long tradition of women traders in West Africa. Three quarters of all female workers are self-employed, as opposed to two-thirds of male workers. Two-thirds of all female workers have no formal education; the comparable figure for males is 45% (Republic of Ghana 1987).

The ratio of girls to boys is lower at all levels and for all types of education (except vocational schools which are almost exclusively devoted to traditionally 'feminine' subjects). Vocational education and training programmes for women are almost entirely reflective of the current traditional occupations which women perform. The problem is not so much convincing Ghanaian women to take on new occupations; the Ghanaian woman is resourceful, independent and willing to take on almost anything. The problem, where it arises, lies in the fact that until recently, many women traders could earn as much as skilled manual workers.

The Ghanaian education system is regearing itself to the assumption that those passing through it will become self-employed or find employment in the informal economy. The government, once the employer of last resort, is now 'redeploying' 15,000 workers a year, with a total target reduction of 45,000 by 1989. This has had important consequences, especially for post-primary education: for secondary school leavers, previous expectations of white collar employment after secondary school are no longer realistic, but almost all still think that manual work is inappropriate. Therefore, a group exist who have increasingly narrowed their own occupational opportunities, without necessarily realizing the obstacle this will constitute in the saturated formal sector. Young people with secondary education can no longer model their occupational strategies on those which worked for their parents; knowledgeable middle-class parents are exploiting their own networks to the fullest to get their children into vocational programmes which baffle them, and which they would previously have seen as lower class and undesirable.

The social and economic consequences of the Economic Recovery Programme have been harsh for most Ghanaians; in an attempt to redress them, the government has established PAMSCAD, the Programme for Mitigating the Social Consequences of Development. One of the questions which must be addressed is what happens to those people whose productive lifetimes are now 'falling between two stools'; 'the good times' of the 1960s and the projected good times in the future. What models have they for organizing their working lives; and what are the consequences of their decisions for later generations and for the economy of the future? And finally, how, in particular, does this apply to women? How can they be trained and educated to enhance the kinds of working lives which, in the current circumstances, they are likely to face?

Although these studies are not intended to be representative of Africa, Ghana and Zambia encapsulate a number of African problems of productive life, women's education and culture: 'fuzzy' informal economies; low participation of women in all forms of education; comparatively poor performance; and cultural pressure toward a restricted range of occupations. In helping these women to improve their productive lives, I think we have to look at some assumptions which we make about development, about what people need and want, and at how they actually live their lives.

What people need: here is the answer, but what is the question?

In 1971, Conrad Arensberg pointed out a simple fact about development experts: they are 'programme-oriented' rather than 'problem-oriented'. By the time one has become an expert in something, one has 'bought' the whole package; thus, hydrologists think irrigation is the key to the Third World's ills; teachers look to universal primary education. Development agencies do the same thing on a larger scale, one focusing on primary health care, another fixed on economic rectitude, a third on vocational education. When we are faced with the alien poverty, stupefying cultural customs, strange languages, mulish 'ingratitude', and suspicious drinking water of the Third World it is psychologically gratifying to have one fixed, immutable certainty: the programme. It does one no end of good, particularly when hot, sticky and insecure, to pull out one's programme and starting applying it. Development 'shoemakers' stick to their lasts, failing to consider that what the customer may really need is a coat, or that he doesn't have feet at all. As a results, the Third World recipient has to cut his coat to fit the donor's cloth, tailoring his needs to the compartmentalized world of experts.

Is this an oversimplification? How many people, in the face of an obviously bad situation, have had the opportunity to find out what is really wrong? And if they had it, how many are equipped to conceive of problems in ways that may lie beyond the confines of their own fields? But using a programme approach can blind experts to what people need and what people want. True to my statement that shoemakers stick to their lasts, I, as a researcher, intend to suggest that what we need is more research.

We must know what people need, as opposed to what we think they need in the 'world according to our programme'. We need to ask, instead, what the problem is. For example, instead of immediately asking the question, 'How can vocational education enhance the quality of women's lives and how can women avail of it?', we should begin by asking. 'What are the needs of various categories of women? What will improve their quality of life within the context of Zambian present-day social and economic life?' The question of vocational education should be asked much further down the line in order to put it in context and use it effectively. Two of the higher-order questions which arose in the course of my research are how can we plan training and education for employment in a type of economy which we don't understand, and which has not been properly described; and second, what is the underlying sociology of vocational programmes?

The nature of the informal economy

We cannot forecast what vocational education and training people need until we have a better understanding of the informal economy. Hoppers (1986) has already raised this issue in his book, *After training, what?* The informal sector functions when it is the employer of last resort for small numbers; when it is the largest employer of only resort, when it is the basis of a nation's economy and formal and non-formal programmes alike are gearing themselves toward it, lack of information is foolhardy. An Irish farmer once said to me: 'When farming was a way of life here, it worked; when it became a business, it didn't'. Something similar might be said for informal economies as the basis of national planning. Even when census information is available on occupational breakdown, and one can, as in Zambia and Ghana, get some rough idea of numbers in the informal economy, essential information on its direction, needs and capacities is lacking. Sectors of the informal economy, such as the lowest levels of trading in Ghana and trading in certain commodities, are either saturated or likely to be soon. The export plans of the country are not clear, and those who have tried to involve themselves in export find it difficult to get advice or assistance. Programmes on training for self-employment, if carried to complete fruition, which is most unlikely, could produce an excess of cassava processors, soap-makers, seamstresses, etc. While, for a variety of reasons, there is little danger of these programmes reaching their stated targets, it seems most unwise to promote major replications of such projects, with their attendant expectations of a livelihood, without having a better understanding of the characteristics, dynamics, and projections of the informal market.

The functions and structure of vocational education and training

Presumably, one of the primary functions of vocational programmes is to enhance people's occupational lives by preparing them to meet the needs of a changing economy and the specific aims of employers. But we also need a better understanding of the sociology of vocational programmes - the educational, cultural and social traditions which have been brought into the system historically, from what internal historical base they developed, and whether they will 'work', if indeed they ever did. What are their functions now? To provide credentials as an additional screening device for employers in a declining economy? To provide alternative education and prospects for an elite who would formerly have been university material? In other words, what are the social functions, and have they assumed a superseding role? This then leads to other questions, such as what happens to the people who cannot get in?

In relation to women, is the question how to get more qualified women into a diversity of courses in the formal system or is it how to adapt programmes, formal or non-formal, to meet the needs of ordinary women?

Most women in Africa must work outside the home. If their employment is to be treated seriously, some form of training, whether formal or non-formal, must be created to meet women's real needs. In the short term, the pattern and content of women's lives will not change, so the training must change.

This raises, the issue of structures. There must be a mediation between institutional structures, on the one hand, and employment possibilities, on the other, and the structures must adapt. Programmes must also be developed which are not simply 'feminine' variations of programmes designed for men's lives and roles but ones which are responsive to the strengths and constraints of ordinary women.

In Zambia, there are a number of reasons why more women are not participating in vocational training: they don't get enough years of formal education to qualify for entrance into increasingly elite vocational schools; they do worse on almost all exams; there are not enough places in vocational schools for men or women; women's domestic responsibilities, lack of free blocks of time, and greater poverty make existing formal institutionalized training structures unrealistic; and some people, including some women, think that some of the skills taught in vocational schools are not 'feminine'. What they needed, therefore, was a problem-oriented flexible arrangement rather than a programme-based institutionalized structure, a better 'goodness of fit' between the reality of their daily lives and the 'solutions'.

Are formal institutions sufficiently flexible to do this? Or can non-formal programmes provide workable models instead?

The advantages of non-formal systems are considerable: while they usually lack the institutionalized ability to confer credentials at a sufficiently high status level (Hopper's 'social charter'), they have a number of positive characteristics which arise out of their very lack of institutionalization: the ability to identify targets quickly in relation to particular groups, areas, problems, etc., and the flexibility to respond quickly to re-shape and re-create new programmes. Often they have the potential for a holistic approach: they can assemble all the necessary support systems, of which training is only one part, in an unbroken chain, to meet an end, such as setting people up in self-employment. In Third World societies, this 'holistic' model is more familiar to people than the compartmentalized systems of modern state societies: traditionally, where the family was also the agricultural productive unit, it encompassed a number of functions, expanded and adapted to meet the changing size and needs of its work force; and carried out the entire unbroken chain of activities needed to complete the tasks before them. While they were not necessarily as efficient as specialized one-function institutions, they did see their problem as a whole, and tried to integrate all the resources available to meet it.

What non-formal vocational programmes usually lack are the funding and staffing to exploit this advantage, and the infrastructural ability to replicate successful programmes on a wider scale (which would usually mean institutionalization, and a subsequent loss of flexibility).

What people want: alternative views of culture

The two major questions in anthropology are: 'What are the similarities and differences, physically and culturally, among the peoples of the world?'; and 'What accounts for these differences?' These are questions which have intrigued philosophers for centuries. The history of Western thought has been characterized by three major approaches, the first two of which are rational and drawn, once again, from the Enlightenment tradition. Universalists like Hobbes and Voltaire argued that cultural diversity is superficial; people are apparently different but really the same in their underlying rationality. Evolutionists like Tylor and Frazer recognized that ideational diversity was real, and represented developmental stages of rationality, with the Western world as the pinnacle; in other words, people are different and unequal. Relativists such as Hume and Levy-Bruhl saw real differences, differences that could not be ranked but only understood in the context of the society itself: people are different but equal.

All of these views are with us today in popular thought, in the 'human sciences' and in development programmes, which are based upon a synthesis of the first and second: people unlike ourselves are simply in earlier stages of our own development, but underneath, we are all the same, and what motivates and works for us will, with a little rational persuasion, work for others, too.

But in order to see why this is not always the case, we have to re-examine the way we look at culture. The CESO Position Paper on Culture, Education and Productive Life in Developing Countries expands the anthropologist Ralph Linton's behaviourist definition of culture and concludes that culture is "the configuration of learned behaviour and results of behaviour whose component elements are shared and transmitted by members of a particular society..." (1964:21). Few anthropologist would use that definition today.

Since the mid 1950's, spurred partly by developments in linguistics and partly by the development of 'information theory', anthropologists have moved from a behaviourist definition of culture as a collection of customs or behaviours to culture as ideas, or ideational definitions: just as language is a shared ideational system for creating appropriately structured utterances in new situations, culture is a shared ideational system which enables us to generate appropriate behaviour in new circumstances. Culture, then, is knowledge: a system of shared ideas, concepts, rules and meaning that underlie and are expressed in the ways that humans live (Keesing 1981: 68). It is not behaviour and customs, but the ideas which are used to shape behaviour and customs. As Goodenough has said, this knowledge gives us standards for deciding what is, what can be, how one feels about it, what to do about it, and how to go about doing it (Goodenough 1961: 522).

Some anthropologists, following the Enlightenment or rationalist tradition, view these ideational systems as rational and therefore amenable to change through the application of logic. More recently, however, some have argued that much of culture, including our own, rest in the realm of the non-rational - not irrational, but non-rational, and therefore not susceptible to change by logical or 'scientific' arguments.

I share this view. Some of our own dearest and most deeply-held beliefs will never be shifted by sweet reason or argument because they are non-rational: the dog is man's best friend; pink is a girl's colour; the best English in the world is spoken in Dublin; gin is a depressing drink - are all cultural premises cherished somewhere in the world. People's beliefs about hangover cures or what causes the common cold almost always fall into this realm: wet feet or damp hair or draughts are avoided religiously by people who have a perfect understanding of viruses. People who pride themselves on rationality may still feel uneasy about celebrating Christmas in the middle of the summer in Australia; telling them the first Christmas was probably similar does not help. Westerners who believe that God is all-powerful will ask Him to cure terminal cancer but will not ask Him to replace an arm lost in a car accident; God can't do that.

The non-rational elements of culture go a long way toward explaining why well-planned 'reasonable' programmes may fail. One of the things I discovered in Zambia and Ghana, and of course in many other places, is that while most women certainly want to and realize they must improve their income-generating capacities, they want to do so within specific sets of cultural premises which make their lives worthwhile. Some of these do not always accord with our Western cultural premises about democracy, the integrity of the person, the equality of all people, the individual as the basis of contract, etc. What makes a man a man or a woman a woman are basic cultural premises in any society. What makes a woman feminine, not only in the eyes of the world, but in her own eyes? In Ghana, a woman is not a complete person unless she has children. This is fundamental. Most Ghanaian women work outside the home, but they do not talk about 'job satisfaction' or 'career prospects'; they do what they do for their families, particularly their children. Some men argue, in fact, that women marry only for children; husbands are secondary. Zambian women emphasize children as well; they also place great store on looking nice. Some women reject 'dirty' work on that account. It is difficult to convince some Ghanaian women, who see trading as accessible, profitable and 'feminine appropriate', that training for occupations in which they might be curiosities and probably earn less is a step in the direction of equality. Other women reject certain jobs because they believe no one will marry them. Even more women are reluctant to get higher education for the same reason: it reduces the pool of marriageable men to those with even higher education. These concepts are not simply traps which males have created to hobble women; women, too, have ideas about what female humans are like, and what makes it worthwhile to be female. These can be changed, if some more important problem warrants it, but not easily. The lives of most Third World women are short and hard; they do not necessarily want to act as cannon fodder for experimental programmes based on alien cultural premises and what are sometimes ill-founded notions of what constitutes the status of women.

Development programmes have always taken male identity and integrity into account; males are consulted, they are given control over technologies which traditionally were the realm of women; their employment problems are considered first, sometimes in the interest of political stability; and care is taken not to damage them by 'feminine appropriate' work. Who has taken as much care for the integrity of women's identity? We have concluded that we are entitled to make major alterations to women's notions about themselves because we have assumed that the status of women is lower in 'developing' countries than in the West, that they wish to have lives like those women in the West, and they are simply in an earlier stage of development than ourselves. For example, currently there is an emphasis upon getting women in developing countries into 'mainstream' (i.e. traditionally 'male') occupations such as carpentry and mechanics. Forty years ago in the Western World, perhaps, women carpenters and mechanics might have symbolized a breakthrough, doing 'male' work in relatively respected, well-paid occupations. In Zambia, however, there are not enough jobs for male carpenters and mechanics; the work is no longer well-paid, and men are not anxious to train in these skills. The 'mainstream' occupations which international agencies have fixed on as 'mainstream' are indeed traditional male jobs: that is, jobs which were desirable and well-paid for men in the past. They are 'old technology'. What would it symbolize, or what would it profit a woman, for that matter, to train in them now?

Why are we not training in the areas which are becoming male occupations now? Command of new technology is command of money and status; command of old, poorly-paid technology is what we are wishing on ordinary women who are not on the cutting edge of Western feminism; and who are not interested in using their lives to illustrate notions of status which are not only culturally meaningless, if not offensive, but which also do not meet the primary requirement of providing an income. Murdock, in a cross-cultural sample of world societies, has shown that when new technology or new progresses are introduced into a society, they, and the activities associated with them, are assigned to males, regardless of which sex was associated in the past (Murdock 1973: 212). By using rather dubious Western indices such as those described above, we are aggravating this process and helping to increase the chances that women will be left out of the technological revolution in Africa.

Most programmes are based on assumptions that there are 'keys' to development and that implementing them will have a 'domino-effect'. But are there 'keys' to improvement in the condition of women? I do not think we know. If we take the status of women, for example, Martin King Whyte has shown through cross-cultural analysis that most of the factors which we in the West assume will have a 'knock-on' effect do not: he concludes that almost all characteristics which have been suggested as aspects or indicators of the status of women, such as contribution to subsistence, control over property, over means of production or over distribution of fruits of production are not predictive of other aspects of status, and are essentially unrelated.

Many development programmes now have guidelines for projects which build in these assumptions: projects will not be approved unless they incorporate them. The National Advisory Board for Development Cooperation (NAR) states that "more attention should be paid to improving the status of women... in comparison with men" and concludes that one way of improving the status of women is "greater access to and control over the means of production" (NAR 1986: 14). NORAD policy is similar. Assumptions like these have now been included in documents by African women's research development organizations. But we have to be careful in prescribing for women, since neither history nor cross-cultural insights have been able to provide clear-cut guidelines on what 'triggers' improvements in women's status and conditions. If we do not have as many answers as we thought, therefore, where do we go from here?

Finding out what people need and want

We need to find out what people need and want, what people's lives are really like, so we can take a problem-oriented approach. "Ordinary' people should be involved in this. The International Labour Organization has said:

> *"What women - and particularly rural women - see as their most important need may not be necessarily what they identify in front of the village community or the visiting aid agents.*
>
> *In designing a project to meet women's needs, one of the most delicate problems is to decide how the genuine needs and problems of a usually not very articulate target group can be identified without imposing outside concepts."* (ILO 1985: 26)

We know that people with more power study people with less, the educated study the uneducated, the wealthier study the poorer, men study women, the First World studies the Third. The researchers set the agendas and the questions. In recent years, this trend has begun to be modified somewhat; the African subjects of previous anthropological studies, for example, are now studying themselves and commenting on the work of their Western predecessors. However, even most of these researchers are still elites within their own societies.

People should be taught to study themselves (Kane 1984). We need to extend the power to determine the issues and to phrase the inquiry to the whole community, not only for ethical reasons but also for practical ones. We need to know, for example, what women in all their variety actually do, at various points in the life cycle and day by day. What are their real options, as opposed to ideal (and sometimes impractical) ones outlined for them by people, agencies and governments who do not have to live their lives? What would our programmes look like if we based them on reality? Information on women's lives is essential not only for an understanding of how they might realistically be improved, but also as a baseline for developing programmes to prevent the existing cycle being repeated in the lives of their daughters.

Summary

This paper has examined the contribution which certain anthropological insights can make to a better understanding of the problems which arise in educating women for enhanced productive working lives, with special reference to studies of Zambia and Ghana.

It can be said that people's culture provides a set of answers for that people's problems. Answers developed in one culture are not necessarily appropriate for another. Organizing development uncritically around programmes, rather than looking in each case at problems, means forcing our answers, usually Western, on other people's problems. We must know what people need and want; in order to do that, we must take a problem approach.

Most development approaches are based on the assumption that cultures can be ranked on a continuum, with the Western world as the yardstick, and the 'developing' countries falling considerably short of the mark. While this 'evolutionist' view can be said to be true for certain aspects of technological innovation in human history, anthropologists would not accept it as being true for people's culture, or ideational systems.

Anthropologists today have moved away from the concept of culture as behaviour, to culture as ideas. This has important implications for development studies, because while behaviour can be changed, the ideas which underlie behaviour are more elusive, more difficult to identify, and therefore less susceptible to change.

Even more daunting is the fact that much of culture, including much of Western culture, is based upon non-rational (not irrational) ideas or premises which are as central and fundamental to the way we live our lives as any of our more logical and 'scientific' beliefs. Societies need to do certain things to survive; how people want to do those things is largely determined by their cultural premises. Development programmes, in working out new answers for people whose old answers may not longer work, may overlook the underlying cultural premises which made the original answer meaningful to the people who practised it.

The ability to do research, to find out what people need and want, confers power - power to shape the agenda, to select what issues are important and what are not, to influence policy and reshape programmes. There is no mystique to research: it is simply a more organized and rigorous version of the normal human information-getting processes. Almost anyone can do it. Not only ethics, but practicality tells us that people must participate in the process of examining their own cultures and lives - not just Westerners, not just native elites, but the people whose lives we are discussing at this conference.

Note

1. The informal sector in African economics has been variously defined. Here it is being referred to as a sector, in that while it is a residual category of disparate activities, these activities have in common the fact that they exist as a shadow system of formal economic activities, and have their own essential requirements for functioning, but are nevertheless forced to function first and foremost within the social political and legal rules of the formal mode of production.

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3.

From Education to Work: the Cultural Dimension

Cheng Kai Ming

This article attempts to identify the cultural characteristics of East Asian nations by way of their practices in education at all levels and in all sectors. The paper then describes an on-going research effort to look into the career counselling practices in Hong Kong, and try to explain the effect of such cultural characteristics on economic lives, with special reference to work ethics and employment.

The research seems to suggest that there is an Eastern Asian culture, where individuals are expected to adapt themselves to the community, vis-a-vis the Western European culture, where the community is expected to adapt itself to individuals needs. The cultural characteristics may explain the competitiveness of the East Asian nations, as well as the high pressure in their social life. This difference in culture may also extend to concepts such as 'self', 'equality' or 'democracy'.

Hong Kong is among the very few places without unemployment. A probe into the issue has led the writer to believe that there is a cultural element which may contribute to the non-existence of unemployment. After looking at various aspects of theory and practice on education, the writer is convinced that this cultural element has to do with the individual-community relations and that there is a marked difference between its interpretations in Eastern Asia and in Western Europe. Based on this belief, the writer has designed a project which is to study the transition from education to work among university graduates.

Some preliminary findings of the project seem to suggest that the high adaptability of individuals to jobs has contributed significantly to the reduction of unemployment.

Cultural shock

There were two 'cultural shocks' which have led the writer to the present thinking.

The first happened in Europe during the writer's visits, starting in 1983. There were outcries of a 'lost generation' in Western Europe, where those university graduates who could not find a job feared they might be jobless for the rest of their lives. There may have been mild exaggeration in the outcry, but nonetheless unemployment was a serious problem.

Both structural and non-structural unemployment may be attributable to a lack of adaptability of the work force or potential work force. The kind of computer-phobia, which is based on the belief that computers will lead to technological unemployment, has caused several depressions among industries which might have prospered by computerization when facing international competition. The lack of personal adaptability has also caused serious structural unemployment, simply because it is not always easy to find a job which matches individual personality.

One of the remedies for unemployment in Western Europe, therefore, would be to set up training facilities to train the unemployed, not for particular job skills, but in adaptability. The 'breeding centre' in Nijenrode near Arnhem, the Netherlands, for example, is a typical example, as it aims at breeding 'entrepreneurship' and 'enterprising spirit'.

What is interesting is that such a self-centred and non-adaptive mentality is very much encouraged by the educational system. Until recently, for example, career counsellors in schools have always seen their roles as making students aware of their personality characteristics, by way of aptitude tests, to find jobs accordingly. But career counselling is only a small part of the whole story. Individual needs have always been a central theme in the Western theories of education.

Is it unfair to argue, then, that the unemployment that Western Europe is suffering from is related to the way people are educated?

The second 'shock' was caused by the opposite phenomenon. Mainland China has, since 1985, been working hard to phase in nine-year compulsory education. The reported enrolment ratio in the school year 1986-87 was 97.1%. Although there are suspicions among international organizations that such figures may represent an overstatement, there is yet little in the writer's research experience, or in other research projects to disprove these claims. The 'shock', however, was that children are not only required to attend school, but are also required to pass a primary graduation examination. The national achievement ratio in 1987 for primary schooling was 95.1%. The target of the whole nation is to maintain 95% through the years up to the year 2000. Again, there are doubts about the figure. It is hard for a foreigner to conceive how primary pupils, in urban and rural areas alike, supposedly with different abilities, could be engaged in a unified curriculum, using unified textbooks and yet be required to pass unified examinations.

However, the writer has witnessed during recent research missions (e.g. Cheng, 1987) how such 'compulsory achievement' works in practice. A typical case is a small village school which practises the 'teacher accountability system'. It is a kind of target-oriented instruction, with targets typically displayed on the door of one classroom[1]:

	Passing rate	*Credit rate*	*Distinction rate*
Basis	45%	15%	40%
Target	30%	20%	50%

It is often out of a teacher's professional conscientiousness that these targets are set, in the belief that hard work is the prime factor that supersedes genetic elements of ability.

The Mainland China case is by no means unique in Eastern Asia. Although different countries may have slightly different ways of educating the younger generation, there seems to be a general concept of training individuals to adapt themselves to whatever is required by the community. Although failures in this effort are common, the motto 'diligence compensates for stupidity' is seldom challenged in that part of the World.

Is it not, then, also viable to hypothesize that the absence of severe unemployment in Eastern Asia is attributable to the concepts of education there?

Literature

It would be naive to pretend that the idea of an identifiable culture in Eastern Asia is novel. There is a rich body of literature on the topic. It is a topic of long tradition and has also attracted attention recently.

Fei Shiao-tung, a student of Malinowski and China's pioneering sociologist, in his now classical *Earthbound China* (1947), identifies a distinction between the social configurations in China and in Western society.

As a summery of his anthropological case studies of Chinese villages, Fei opined that members of most Western societies participate as individuals in an association. He called this 'group configuration'. Whereas members of the Chinese society participate as an element in a hierarchy. He called this 'hierarchical configuration'. In the former, people interact according to a kind of social contract; in the latter, people act according to social expectations.

Fei did not go into education, but the implications of his views for education are well echoed in Solomon (1971), who discovered that in traditional Chinese families:

> *"Parents of the gentry or would-be gentry put great demands on their children for successful scholarship, for they saw their future well-being and the prosperity of future family generations as contingent upon the achievements of their young (...). These parents, and to some degree teachers, transmit their concern for status, security, wealth, and power to their children through demands for good scholarship"*(1971: 88).

Solomon's conclusion is made on several assumptions. First, it is a family-bound matter, which is well discussed in almost all literature on Chinese culture. Second, in the Confucian tradition, there is an openness for class mobility (Ibid.: 82). Third, it is made clear to the child very early in life that education is the only social ladder. Fourth, it is also made known to the child that there is going to be 'a clear if painful path, and distant yet appealing goal'.

The other study which is relevant to the present discussion was done by Hofstede. In a survey of some 60.000 respondents belonging to 67 nationalities, Hofstede measured 'individualism' as one component of work-related values. In his findings, Hofstede identifies Hong Kong, Taiwan and Singapore as odd countries which score rather low in the individualism index. Not only do they score low, they also fall way out of the general trend which correlates to the wealth of the country. The findings seem to agree with Hsu (1985) in that, unlike in the U.S.A., individualism is almost an evil in Chinese communities and "the concept of personality is an expression of the Western ideal of individualism". For Hsu, personality 'includes the person himself plus his intimate societal and cultural environment which make his existence meaningful', because his entire self is 'to meet essential requirements placed upon him by virtue of the social position he occupies' (Ho 1979: 867). As a consequence, people in the Chinese culture tend to score low in individualism.

The general context: the individual-community dichotomy

The first 'shock' mentioned above has led the present writer to a conceptual framework for a cultural dimension in education. The main theme of this cultural dimension is the relationship between individual and community and its interpretation at different levels of educational practice.

Such a conceptual framework is pending comprehensive research efforts to validate it, but is induced from a number of observations.

Structure of educational systems

To start with, a look at the structure of educational systems in Japan, South Korea and Hong Kong, produces more or less the same chart: a large mainstream for post-compulsory secondary education with some peripheral sectors of technical and vocational education. The enrolment rates in senior secondary schools are 92% in Japan (Hiroshi et al. 1983), 81% in South Korea (Ministry of Education 1986) and 86% in Hong Kong (Education Commission 1985). All three places offer fairly comprehensive and sophisticated systems of technical and vocational training, but the enrolment in these sectors remains limited.

In Mainland China and Taiwan, there has been, in recent years, some diversification at the senior secondary level. The mainland moves towards a 50-50 ratio and Taiwan has achieved a 30-70 ratio between general and technical/vocational senior secondary education. Conceptually, general education remains the mainstream.

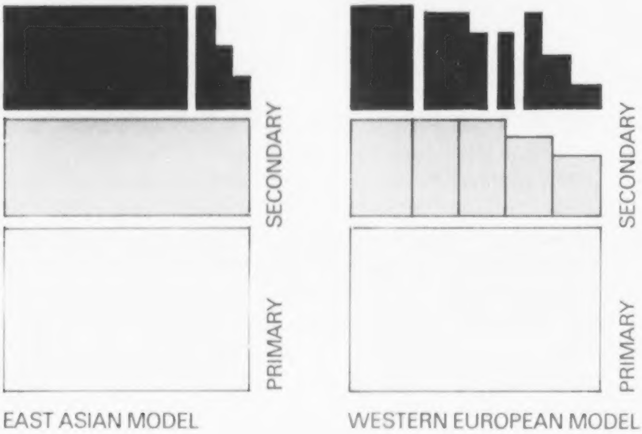
However, if we take the five areas altogether, we find their educational systems share some very similar characteristics. The five systems all have a unified school curriculum at least up to the junior secondary level, unified in the sense that all five systems have a single stream primary school system of six years and a single stream junior secondary school system of three years.

This is distinctively different from the school system in, for example, Western European countries. In Holland, students go through one common core year for orientation after primary school and diverse into LAVO, MAVO, HAVO and VWO. In West Germany, apart from the comprehensive schools, the tripartite system of Hauptschule, Realschule and Gymnasium starts right after primary education, at an early age of nine, after two years for orientation. In France, pupils split up, after a two year 'observation' period, at the age of thirteen.

It seems justified then to claim that in terms of structure, there is an Eastern Asian Model *vis-à-vis* a Western European Model. The following diagram may help to highlight the difference.

One interpretation of this difference may refer to the individual-community dichotomy. The uniformity in curricula reflects the notion that although students are born different, they should be able to achieve the same. This goes parallel to the basic philosophy that it is the individuals who should adapt themselves as far as possible to the system. This is almost opposite to the Western philosophy that the community should cater for individual needs as far as possible.

Figure 1. *Schematic diagrams of the educational systems*



The concept of ability

The uniformity in curriculum also reflects a difference in the conception of ability. Ability in its Western sense does not prevail in Eastern Asia. The term 'ability' comes into play mostly in two contexts. First, educators talk about 'the cultivation of ability'. This is, for example, used quite often in official documents in Mainland China. There is a belief that ability is something that can be developed and improved, and this is the objective of teaching. Students' performance is therefore directly attributable to teachers' performance.

In China there are numerous writings, academic and otherwise , which discuss the various components of ability and how it can be enriched or upgraded. Second, the old Confucian motto 'teaching according to ability' is still prevalent. This usually means that students with different abilities should be taught with different methods. This is not to be mistaken as the Western notion of satisfying individual needs. In the Western notion, pupils follow different curricula and achieve different things in the end. Here, in Eastern Asia pupils follow the same curriculum and in the end are expected to achieve the same.

This concept of ability is prevalent in the community. Parents in Eastern Asia do not quite accept the idea of streaming, not for reasons of equality, but because of the belief that everyone should be able to become the 'champion'. This is a strong tradition, as is reflected in the many ancient Chinese stories in which scholars strived extremely hard, followed the unified syllabus (The Four Books and the Five Classics) and eventually became national 'champion' in the contest of civil examinations.

This also explains the phenomenon that in the Eastern Asian context, although there is provision (sometimes over-provision) of well-equipped technical/vocational education institutions, parents of 'under-achieving' children still opt for the 'academic' stream. This mentality also explains the examination pressures that are prevalent in the Eastern Asian region. People respect unified examinations; they respect competition. It is competition on a unique course for an overall 'champion', rather than the competition on the diverse development of talents.

Early childhood education

There is a visible conflict between the intentions of Western-trained pre-school educators and the desires of parents in the Eastern Asian region.

On the one hand, most of the qualified pre-school educators have received their own education in the Western tradition which emphasized the importance of individual needs and individual development. Hence, they tend to minimize elements of conformity and attempt to avoid disciplinary measures as much as possible. On the other hand, there is the strong tradition that children should be socialized as early as possible and they should conform to social norms. There is a strong pressure from parents who opt for conformity. Children are traditionally taught at a very early age to behave according to social expectations. Even educators, part of the culture themselves, are not totally convinced that conformity is not necessary. Often, they find themselves lost in the dilemma.

As an example, parents believe that *Kindergarten*, and sometimes even nurseries (for ages two to four), are part of schooling. Children should be taught to write Chinese characters from the very first day of *Kindergarten*. Educators realize that early writing is inappropriate and try to postpone the practice. This has created much annoyance in one way or another. Children are taught to sit, stand, hold chopsticks, and even pens and pencils, in a uniform 'proper' way. This is not a practice of 'manner' in the Western sense. It is conceived as 'wrong' otherwise.

The design and choice of toys is another issue. Despite continual encouragement to develop children's creativity, parents in Mainland China, and perhaps pre-school educators too, still concentrate on ready-made, eye-catching or electric toys rather than those that would allow children to build things from their own imagination. Toy building bricks similar to the Danish 'LEGO' have appeared in Mainland-Chinese kindergartens only very recently. The Japanese 'transformers'[2] allow complicated variations, but follow a very strict formula and allow no creation. Japanese designed computer games, which entail strictly programmed actions, sell well in the market.

The adoption of 'activity approach' in *Kindergarten* and primary classes supplies another example. Educators sincerely believe that learning should be lively and interesting. With little reluctance teachers in Hong Kong, for example, move towards the 'activity approach' which splits the class into groups and makes student activities the central concern. However, there is little of the Western sense of 'activity approach' where it is purposely designed that different groups may progress at different paces. The idea is to cater for individual needs. Whereas in Hong Kong, 'activity approach' is regarded as a better way of motivating pupils to achieve.

Career counselling

Then we come to the main theme which pertains to the present research. Fan (1985) identifies two kinds of information career counsellors may provide students with: personality information, which is psychological, and job-market information, which is economic. In the ideal case, a good career counsellor should provide both, hoping that the students will hit a balance during their career selections.

However, there seems to be a marked difference in emphasis between the practices in Western Europe and those in Eastern Asia. While the Western European model emphasizes personality information in terms of relevant psychological tests, these are hardly popular among the Eastern Asian students. In Hong Kong, perhaps the most Westernized place among the five, institutions of higher education offered personality test facilities some fifteen years ago, but had to stop them simply because they proved unpopular. Students take job prospects as the most important criterion for job selection. Personal suitability comes very low in their priorities. In other words, they look for job satisfaction rather than job satisfactoriness (Cheng 1987a). The situation in secondary schools is very similar.

It is interesting to observe the implication of this notion of job satisfaction in Mainland China, which still is a planned economy, but with significant breakthroughs to allow for self-employment. There is a sharp change in students' career orientation which is directly prompted by economic considerations. This has resulted in a severe shortage in, for example, natural science students who used to be most prestigious, and lack of applications for postgraduate studies.

The research project

It is along this line of thinking and the observation in the previous sections that the project is designed and piloted. The major body of the research is yet to start pending adequate funding.

The purpose of the research is to examine the relationship between education and employment among university graduates in Hong Kong. It consists of three components.

First, there is a general survey of the employment situation for graduates of degree courses. The higher education institutions provide annual summary reports on graduates' employment and finer analyses are also available.

There are two universities in Hong Kong and a third one is being established. Apart from the universities, the two polytechnics also offer degree courses, but only one of them has yet produced graduates. The following table displays a summary of the graduate employment situations of the two universities.

Table 2. *Graduates' unemployment rates: a summary*

	University of Hong Kong	Chinese University of Hong Kong
Time of survey	Nov/Dec	Nov/Dec
1983	6	-
1984	4	2.0
1985	2.0	3.3
1986	1.5	2.1
1987	1.7	1.2

The figures refer to percentage.
(Source: Employment survey of respective institutions)

It is clear that the unemployment among graduates in Hong Kong is insignificant, and there is an overall decreasing tendency in the unemployment rate.

At least for some time in the near future, there will be no pressure of graduates' unemployment. On the contrary, there has been recently a shortage of manpower at all levels, and we might speak of an 'employees market' rather than of a 'job market'.

This gives a favourable climate for the research. The manpower shortage has opened more opportunities for career selection and hence there is no pressure to ignore personality considerations.

The higher education institutions also collect data on the matching of jobs to training. Unfortunately, the data and their analyses do not lend themselves to direct understanding of their motives for choice, because there is a lack of breakdown in the precise job nature. However, there is a general picture that most graduates (non-medical and non-dental) end up in the private commercial sector, regardless of their areas of undergraduate study. It is one of the objectives of this research to investigate to what extent the graduates regard relevance to personality as an important factor in career choice. This will be further investigated in the third component mentioned below.

Second, there will be a study of the actual procedures and activities adopted by the institutions in their career counselling services. A brief preliminary study has been done. The real picture is not far from the following manifest description by the Appointment Service at the University of Hong Kong:

> "*Workshop sessions were organized to brief students on a variety of topics relating to graduate employment, which included Career Planning, Classification of Occupations and Organizations, Employment Pattern and Career Destinations of HKU graduates, Code of Conduct in Employment, Transition from School to Work, Social Effectiveness, Communication Skills and How to use Career Resources at the Appointment Services etc. Both theoretical and practical sessions on Application Letters and Interview Techniques were also held to provide guidelines to students in these areas*" (University of Hong Kong 1987: 6).

The focus of attention of the intended study is on the kinds of information which are conveyed and the response of the students to the information. This will be done through interviews with career personnel and participant observation during some of the counselling sessions.

The third component will be a set of case studies of 35 graduates-to-be at the University of Hong Kong. This is meant to be an in-depth, non-manipulative case study and to trace the graduates until the end of their first year of employment. The students are spread over all non-medical and non-dental studies. The writer will make use of his Wardenship in a student residential hall in the University and follow the development of the students' career decisions. This will mean (a) an in-depth study of their career concepts, their formation and alterations before final examinations, (b) a second interview on the choice of the first job and their job satisfaction (this will be done within the first six months after graduation) and (c) their reasons for changing jobs in the first year after graduation.

The interviews are meant to work on 1989 graduates. Three pilot studies have been done on three 1988 graduates and the interviews have been designed accordingly. (a) The first interviews will be done in February/March 1989 before the final examinations. This has the disadvantage of busy examination preparations, but the advantage that students are most active in their career considerations. (b) Students real career prospects are not so clear until they are in their first employments. (c) There should be no anticipation that graduates are simply economic-minded. Being the elites in the system (6.5% of the age group) with fairly secure job prospects, university graduates tend to respect some kind of 'ideal'. Therefore, it is the interplay of economic interests and ideals which is of research interest.

The project is expected to continue until mid-1990.

Previous work

The attention on the relation between education and work is only recent in Hong Kong. No specific work has been done, but quite a number of research pieces make valuable contributions to the issue.

Chung has just finished a study of the efficiency of technical education in Hong kong. He has included in his study the career pattern of graduates of technical institutes. An amazing mismatch between training and job has been identified, with high rates of return linked with the mismatch. This is interpreted in the positive sense as evidence of the adaptability and flexibility of the work force in Hong Kong (Chung 1988).

Wong has done a study on the job aspirations of secondary students before graduation. He correlates these with their actual employment situations after graduation. Preliminary results of the study revealed that economic signals play predominating roles in students' job aspirations (Wong 1988).

Fan traced and compared the career counselling processes in secondary schools in Tokyo, Shanghai and Hong Kong, and has primarily identified a prevalent use of labour market information over personality information (Fan 1985).

Leung (1988) has done a study of career choice and job satisfaction among graduates who joined the teaching profession. He discovers that the job satisfaction of such graduates varies inversely to the percentage of graduates joining the profession. In a nutshell this indicates that teaching acts as a safety valve for graduates' employment and is viewed as the least competitive.

All these studies work along similar lines, but face different target groups. Completion of the present project may provide a new band in the spectrum. It is anticipated that some pattern may emerge.

Epilogue

The proposed project is still incomplete, mainly because of the disruption due to the Beijing incident in June, 1990. The incident has substantially changed the career scene for graduates in Hong Kong. On the one hand, enormous emigration has created an extra-ordinary manpower shortage which has distorted the labour market. On the other hand, the rush for quick cash has prevailed over all kinds of career considerations. The situations are rather abnormal and do not prove an appropriate environment for the proposed research.

August 1990

Notes

1. This was noted in the Zhaozhangzi primary school in a poor country, Lingyuan, in the province of Liaoning (See Cheng 1987b).
2. 'Transformers' are metal toys which can be transformed from cartoon robotic heroes to aeroplanes, spaceships, animals, etc.

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4.

Improving the Quality of Life: the Delsilife Way

Jose B. Socrates

Can the rural poor decide for themselves what they need to learn in order to improve their social and economic conditions? Is there an appropriate method to stimulate independent identification of learning needs? Which types of learning are the most appropriate to the physical, social and economic conditions of the rural population?

The Delsilife educational intervention system tries to give adequate answers to these questions in the South-East Asian region. Basic to Delsilife is the belief that true development starts with and focuses on people's development, and that education is an effective instrument of social change. Education that will convince the people of the reversibility of their destiny, that will make them find solutions to their problems, and will equip them with skills to identify and effectively use available resources, inside and outside the community.

This article explains the philosophy of the system, its implementation and management structure.

Preliminaries

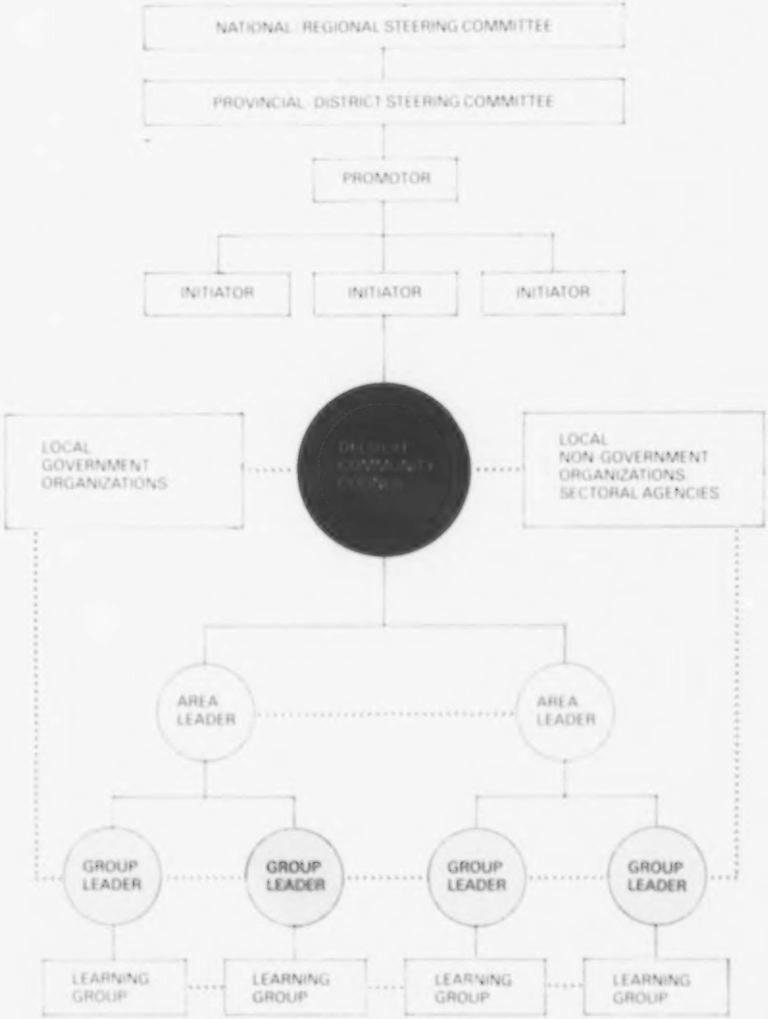
The Delsilife integrated educational intervention system is the product of Project Delsilife[1] conducted by the Regional Center for Educational Innovation and Technology (INNOTECH) of the South-East Asian Ministers of Education Organization (SEAMEO).

The objective of Project Delsilife is clearly evident in its title: 'Development of a Coordinated Educational Intervention System for the Improvement of the Quality of Life of the Rural Poor Through Self-Reliance'.[2]

Project Delsilife was undertaken at a time when there was a growing worldwide realization that the benefits supposed to have been delivered by the schools had not really reached those that needed them most - people in the depressed areas who constitute the majority of the population in most of the South-East Asian countries.

INNOTECH ventured to suggest that education is a very effective instrument for change. Education can and must help to loosen hardened social concepts and structures so as to mobilize the people, to foster group

Figure 1. *The support mechanism for Delsilife*


NATIONAL/REGIONAL STEERING COMMITTEE
PROVINCIAL/DISTRICT STEERING COMMITTEE
PROMOTOR
INITIATOR
INITIATOR
INITIATOR
LOCAL GOVERNMENT ORGANIZATIONS
DELSILIFE COMMUNITY COUNCIL
LOCAL NON-GOVERNMENT ORGANIZATIONS SECTORAL AGENCIES
AREA LEADER
AREA LEADER
GROUP LEADER
GROUP LEADER
GROUP LEADER
GROUP LEADER
LEARNING GROUP
LEARNING GROUP
LEARNING GROUP
LEARNING GROUP

solidarity and self-reliance. The origin of Project Delsilife lies in INNOTECH's desire to share in the mounting world concern over the plight of the poor who predominate in the rural areas of South-East Asia.

Delsilife focuses on people's development. The active participation of the people in decision making, in needs or problem identification, in planning, implementation and evaluation of learning programmes is an integral part of the Delsilife method. This active involvement enables the people to gain better understanding of and control over their daily situations and to acquire the knowledge, skills, attitudes and values which are useful for improving their lot. In effect, the people are not only the objects, the beneficiaries or the ends of development but also, more significantly, they are the subjects, the determinants or the means of such development.

The set-up of the Delsilife educational intervention system

There are two major components of the Delsilife educational intervention system: a structural component providing the support mechanism, and a process model.

The support mechanism

Those forming the support mechanism (see figure 1) are organized bodies both outside and within a community performing specific functions. Outside the community are steering bodies which provide overall direction and guidance to the villages. Within the community, the support structure includes a Delsilife Community Council (DCC), Small Neighbourhood Area (SNA) Leaders, and Learning Group Leaders.

The support mechanism performs the functions of dissemination, co-ordination, training, supervision and monitoring, evaluation and instruction.

Many observers and practitioners have commented that practices in the field by development agencies or individuals are often similar to what are claimed as Delsilife principles. There is truth in this, up to a point. The fact is that many Delsilife principles and concepts are embraced by most development agencies and are certainly not the sole, nor the original ideas of Delsilife.

For example, a village organization is usually called for by most if not all projects and programmes directed at village development. The same is true of Delsilife. Like other approaches, Delsilife supports community-based management. However, whereas in non-Delsilife approaches the roles and functions of the organization, or the specific components of the organization are usually taken for granted, in Delsilife the components of the organization are precisely identified and their functions specified. Thus, where Delsilife is applied it is expected that there be steering committees, promoters (also called initiators), a Delsilife Community Council (DCC), and Learning Group Leaders.

Unlike other approaches Delsilife does not take for granted the ability of the Council to perform its tasks. Delsilife uses trained local leaders. Training of local leaders is an important component of Delsilife. Both the community council and the group leaders undergo training in management and leadership. Where resources permit, group leaders also undergo training to acquire certain sectoral knowledge and skills (e.g. duck raising or mushroom culture) which they share with the other members of their learning group. The group leader, then, becomes a resource person of the learning group at the same time.

A trained DCC ensures continuity of learning programmes. The DCC provides leadership and overall management of the project. In active consultation and collaboration with the learning groups it schedules, organizes, co-ordinates, implements, monitors and evaluates the various learning programmes. Learning programmes often require services from private or government sectors. The DCC facilitates the efficient delivery and utilization of these sectors, avoiding unnecessary duplication and overlapping of functions among concerned agencies.

Moreover, the Delsilife Community Council need not be the politically organized council. Delsilife gives the people the option to:

a. Identify a DCC made up of members they themselves choose (without prejudice to including members of an existing village council).
b. Modify the membership of the politically organized council by adding other members.
c. Utilize the entire existing politically organized council as the DCC with additional functions as a Delsilife council.

To the usual community council members and small neighbourhood (*purok*) leaders, Delsilife has added a purely Delsilife contribution - the learning group leaders who are very intimately involved in the conduct of the learning programmes.

Perhaps the most important distinction between the DCC and the organization concepts of other development approaches is that the functions and responsibilities of the DCC are specified. The DCC in fact plays an important role as part of the Delsilife process. Non-Delsilife approaches may depend on the community leaders only for 'administering' or overseeing a project. In the Delsilife system the leaders are indispensable. Without their active involvement it may not be said that a village has adopted Delsilife.

The Delsilife process

Delsilife is, above all, an educational intervention model. This cannot be overemphasized. As conceived and developed by INNOTECH (which is an educational institution) Delsilife is an educational intervention model, an approach to non-formal education. The Delsilife system conceives of the entire community as a learning community.

The educative process is aimed at developing awareness of the needs and problems of the community. It seeks to raise the consciousness of the people about the quality of their lives. It means to sharpen their intellectual abilities and skills to changing their environment. It aims at enabling the people to make proper choices of actions to improve their quality of life through self-reliance. Yet, there is no abstract or circumscribed body of knowledge, skills and attitudes that must be learned. Instead, learning is gained as the villagers go through the experience of identifying needs and problems and applying options to solve them.

The processes which the project site communities went through and which now compose the process model of the Delsilife system are a series of seven iterative steps (with several sub-steps; see figure 2):

1. Organization and training of the DCC and area leaders
2. Needs assessment
3. Formation of learning groups
4. Training of group leaders
5. Development of learning programmes
6. Implementation of learning programmes
7. Evaluation.

There are two sets of villagers who go through these steps. One set is composed of the Delsilife Community Council who are tasked with the solution of community-wide problems. The other set are the members of the different learning programmes. Problem solving is the heart of the Delsilife system. Whether in small neighbourhood learning groups or in the community council, the acquisition of problem-solving skills through

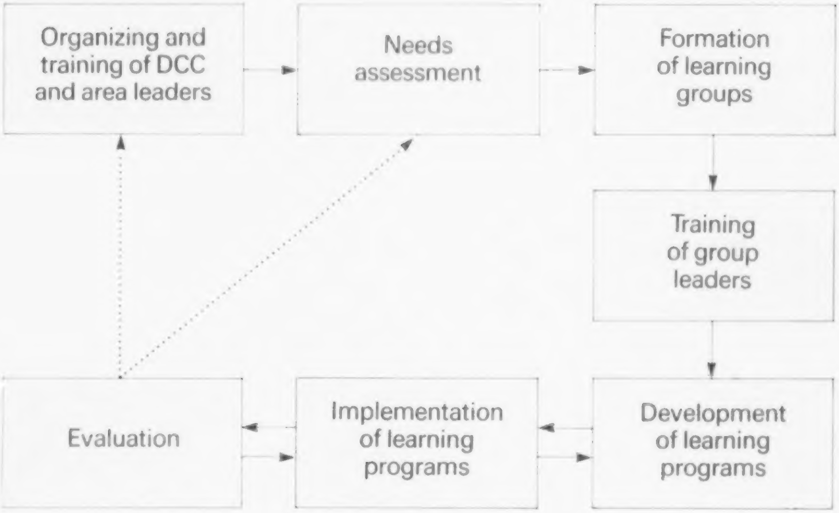


Figure 2. *Basic process of Delsilife*

Organizing and training of DCC and area leaders
Needs assessment
Formation of learning groups
Training of group leaders
Evaluation
Implementation of learning programs
Development of learning programs

learning programmes is vital since these are capability-building and empowering skills that people need to cope with the demands of their physical and social environments - whether in the form of contrived activities or situations or in actual contact with real-life problems integrated into a learning programme.

The Learning Programme[3]

The learning programme is in fact the focal point of the Delsilife process. The educational intervention is actualized in and through the learning programme.

A learning programme is a planned series of semi-formal activities developed and undertaken by a small neighbourhood group of between five and fifteen members, in direct response to a commonly identified and felt need. The group schedules meetings at its convenience. Sessions are conducted by the group leader, often with the assistance of a sectoral resource person. A learning session lasts more or less two hours.

There should be as many learning programmes as there are small interest groups desiring to pursue their interest or solve their problem together. It is claimed that one characteristic of Delsilife is that is it self-renewing. This simply means that as the DCC exercises its supervisory, monitoring and evaluating functions, it is able to encourage the continuous formation of learning programmes.

When the Community has been divided into small neighbourhood areas (SNAs), these SNAs become the main organizational structure or unit for undertaking learning programmes. However, community-wide learning groups may be organized if individuals from different SNAs agree and decide to undertake a learning programme based on a commonly identified problem or need.

Each learning programme has its own specific objective. However, the general aim of all learning programmes is directed towards the attainment of an improved quality of life through self-reliance and, where desired, the acquisition of more economic-oriented skills also called Vertical Instrumental Skills (VIS). As it happened the learning programmes somehow centred on economic-oriented, or income generating ones. This was only a practical reaction to the fact that the villagers were unanimous in their identification of economic or financial improvement as their most pressing need. Somehow the needs assessment phase of the project could not directly elicit any learning needs from the villagers.

The result, however, was that the Delsilife learning programmes exhibit a balance between Vertical Instrumental Skills and Basic Life Skills (BLS) (see section below) - all contributing to the development and attainment of self-reliance.

The group leader

Each learning group has a group leader chosen by the members. Since it is hypothesized that leadership is emergent, shared and shifting, a specific learning group may have different group leaders at various times. Moreover, group leaders from different neighbourhoods may share their expertise with other groups (in a sense act as resource persons). Or else, as a group goes through learning programmes, some members may manifest leadership qualities and emerge to lead their own groups. It is the group leader who monitors these processes, besides planning and managing the learning programme, and acting as the group's resident instructor.

In the Delsilife concept the learning group leader is a must. Without the group leader of a learning group, the organizational structure may not be claimed as an adoption of the Delsilife model.

Basic Life Skills

It may appear, in the course of a visit to a village that has adopted Delsilife, that the more visible and tangible effects of the application of Delsilife are the usual handicraft, vocational, livelihood skills, and that in fact other projects and programmes are better equipped to develop livelihood skills. This is true, but it has also been said that Vertical Instrumental Skills are not the whole of Delsilife. Important and inevitable as they are, it is the gaining of more Basic Life Skills that is the goal of Delsilife. Basic Life Skills are those attributes of an individual, or a group of individuals comprising a community, which together or individually allow that individual or group to perform more efficiently and effectively. Examples of BLS are literacy and numeracy, problem identification and problem solving, planning, cost calculation, risk taking, decision making, organizing and negotiating.

Developing Basic Life Skills

The development of Basic Life Skills is not left to chance. The Delsilife System uses two general techniques to develop or enhance BLS - through direct instruction, and indirectly but deliberately through integration. Of the two, integration is the more intensively and extensively utilized.

Direct instruction has been demonstrated in a few exceptional learning programmes. The best examples are in Koran reading and religious learning programmes, both in Malaysia. In Indonesia and Thailand learning programmes for literacy and numeracy were organized. In the Philippines a learning programme on the problems of working mothers resulted in the creation of a nursery class which has since been integrated into the local school. A similar learning programme in Thailand resulted in a day-care center.

Integration is done deliberately, but subtly, in each learning programme session. Literacy and numeracy are developed mainly in this manner.

It is always tried to integrate literacy/numeracy in every learning programme. It is recognized, however, that some learning programmes lend themselves better than others for this purpose. Moreover, some learning programmes are better suited for the integration of literacy, while others are most appropriate for numeracy. Delsilife assumes that literacy and numeracy become more meaningful and functional when integrated in a needs-based learning programme utilizing appropriate materials and procedures.

It is not, however, the purpose to ascribe more importance to BLS over VIS (or vice versa) in the eyes of the villagers. Both are equally important. What is pointed out is the original purpose of INNOTECH in developing the educational intervention.

One thing needs to be stressed - INNOTECH does not have, nor does it claim to have, the expertise in developing VIS. Therefore Delsilife, as a product of INNOTECH, is more concerned with BLS. However, where Delsilife is applied, among the people the distinction between BLS and VIS is theoretical. BLS and VIS should be considered equally important.

But what really makes Delsilife different from other development approaches is that in the acquisition of either BLS or VIS the people go through a seven-step process, which gives distinction to the approach.

Delsilife addresses education quite broadly. Basic Life Skills may just be considered as the operational definitions of the educational intervention that is Delsilife. Livelihood skills may be outgrowths of the goal of BLS, or they may be the means through which BLS are developed.

The DCC as a learning group

Just as important as the neighbourhood learning groups is the DCC undertaking its own learning programme. The difference however, is that the DCC address community-wide problems, in addition to its own learning needs. Two examples may be cited showing how the DCC applied the Delsilife problem-solving process in resolving community-wide problems.

In Thailand the partial solution to the perennial water problem of the village was effected by the DCC, using an open water pond with an area of about four acres as the problem situation. The result can be described as nothing less than an integrated water pond development - complete with vegetable gardens, fruit trees, ornamentals and of course water, well entrapped for the people to draw.

In the Philippines the DCC, faced with the problem of what to do with a donation of money, took the whole of six months to resolve the problem. It ended up by using the entire amount to buy control stocks of an inactive consumer's co-operative. After a year the co-operative is now a multiple co-operative declaring dividends and can afford to donate funds for the local school.

The Delsilife package

One thing that differentiates Delsilife from other development approaches or systems is the availability of a 'package' which describes in some detail the intervention process itself and provides guidelines to the various individuals in a community who are expected to perform a role in Delsilife.

The package is a set of print and non-print materials each addressed to specific users and actors or participants in the Delsilife process. It is an attempt on the part of the developers of Delsilife to transfer the technology to the implementors in the field. Theoretically, Delsilife is known only to its developers (INNOTECH and the participating research staffs of Indonesia, the Philippines and Thailand). For it to be known and utilized by others, it was decided to capture the system in a 'package'.[4]

There are certainly other ways of transferring this technology, such as through seminars and workshops. It was thought, however, that through the package the transfer could be faster and more widespread. More important, however, the package could be self-sufficient and need not entail additional verbal explanation by the original developers.

In other words, if the package is placed in the hands of a person in authority (such as a Regional Director of the Ministry of Education) this person, after studying the system, and recognizing and accepting the role he/she has to play, will cause the package to reach all the concerned personnel under him/her. In turn, each will study and understand his/her part and perform it accordingly. In the bureaucracy the last person to receive the package will be the district officer (e.g. the District Non-formal Education Co-ordinator) to motivate a village to adopt Delsilife.

For the village itself, the package has manuals for the leaders and learners. Each manual explains what the leaders and the learners are to do; and what they are expected to learn. This is what is meant when we say that the package can be self-sufficient. It was developed as a set of self-learning materials.

Achievements

The objective of Delsilife is quite explicit in the title of Project Delsilife - improved quality of life through self-reliance.

In the first place, 'quality of life' is not easy to define. Neither are its boundaries permanent. A number of questions might easily be raised but not quite adequately answered.

What constitutes quality of life? Who decides on the quality of life? When can the quality of life be said to have improved? What is the base on which 'improvements' may be claimed?

Even at this stage, Delsilife itself does not seem to have definite answers to the questions. Much will depend on the perceptions of the people themselves. Many more will come from observers and non-involved outsiders. Nevertheless local situations have developed in the projects which, as a result of the application of Delsilife - may provide clues to the answers, thus:

1. Where once the streets of a village were littered with plastic bags and other rubbish, the unpaved roads are now clean and the yards well fenced, the brush is replaced with ornamentals and vegetables.
2. Where once a group of teenaged village girls had to wake up before dawn to be picked up by a lorry to work in a plantation, and to be returned only towards sunset, now the girls, having learned how to sew, have set up their own shops in different cities.
3. Where once a middle man, taking advantage of the naivety of embroiderers, made more profit than the embroiderers themselves, now the embroiderers have eliminated the middle man and hence increased their own earnings.
4. Where once farm women had to carry their infants to the fields and there make do with makeshift ways of caring for their children (or where they just abandon farm work to care for their children), now a day-care center can provide food, shelter, and care for the children.
5. Where once an entire community drew water from an open pond the pond has been deepened and surrounded by trees, vegetables and ornamentals and even stocked with fish.
6. Where once women were relegated to minor inconsequential roles in the home and the community now a few of them have even ascended to leadership roles.
7. Where once a community was bereft of access to reading materials now there are several reading centres with current newspapers.

All these situations occurred as a result of the adoption of the Delsilife approach in the site villages of the project. If indeed these (and more) are signs of improved quality, then Delsilife must have been effective in attaining its objective.

It is also quite obvious that in the Delsilife system much is expected of voluntary services. This is especially true in the village. The DCC, as a body and as individual members are expected to volunteer their time and efforts in assistance of the learning groups. This can be a problem if the DCC is the same originally existent group of leaders to whom Delsilife functions are added. Group leaders are likewise expected to volunteer their time and share their skills without compensation. Even the learners, should they have skills, are expected to voluntarily share these with members of the learning group.

The promoters and initiators may not be volunteer workers and may in fact be paid for what they do for villages. But with Delsilife they may have to voluntarily increase their range of activities, hopefully inspired partly by the increased level of activities in the village.

The same is true of sectoral agencies and institutions performing legitimate development assistance to villages. Requests for assistance coming from the villagers ought to heighten the pace of their work.

The expectation of voluntarism may be a weakness of the Delsilife system. In poor villages, where bare existence is the primordial incentive for work, voluntarism may not be easily attained. Voluntarism, however, must be viewed in the context of self-reliance as a development goal of Delsilife. Using the Filipino psyche and value system, for example, it can be invoked under the concept of *pakikisama*, and *pagbinuligay* (mutual help).

One of the features that is ascribed to Delsilife, because it is an educational intervention, an approach and not a project, is that it does not necessitate a common concern of project proponents - funds. This does not mean that the community into which Delsilife will be introduced will not need any financial input for any of the learning programmes and other resultant activities; or that an agency with a specific project to perform in a community should not bring in funds and other material inputs.

What is meant is that if a project makes use of Delsilife to achieve its objectives, it is the project, not Delsilife, that will bring with it money, or material, equipment and personnel input. It means that if in a community where Delsilife has been introduced a need for funds for activities of the learning programmes is felt, it becomes the responsibility of the learning group to search for legitimate sources of funds. In fact the ability to seek legitimate support is one Basic Life Skill which Delsilife seeks to develop.

On the surface it may appear that this is a weakness of Delsilife - the fact that no immediate funding is made available. In a sense this is true. The fact is, however, that in the places where Delsilife has been applied, the people themselves undertook learning programmes which normally would entail funding but for which the groups concerned did not seek external funding to start them off. Yet they ended up generating funds out of their own activities.

In a sense these activities or learning programmes demonstrate beautifully the self-reliance aimed at by Delsilife.

In a sense, too, Delsilife urges its participants to exercise legitimate rights and privileges of citizens - in seeking technical, financial, and material assistance which are, in the first place, earmarked and directed for avail by citizens.

Conclusion

Delsilife is an educational intervention model. As such, it considers education in its broadest sense, as encompassing all areas of life. Its primary assumption is that self-reliance is an individual attribute, and that self-reliance can be achieved mainly through education.

Of course Delsilife tries to avoid being caught in the trap of too broad educational goals. Instead, it focuses on the gaining and development of basic life skills, knowledge and attitudes.

Thus Delsilife provides the development sectors, in particular the Ministries of Education, with an educational approach as another option in its repertoire of strategies for its extension programmes for development.

As an educational approach, its methodology is not alien to the educator, as in fact it is supportive of the non-formal education programmes of a Department of Education. Its main content, Basic Life Skills, defines in very operational terms, for the benefit of the non-formal educator, many of the elusive goals of so-called continuing education.

Delsilife, however, will not compete or take the place of any specific programme thrust of an Education Department. There will be no inhibition on the part of the Ministry to organize its projects from year to year. Instead, Delsilife will facilitate the attainment of the objectives of a programme more extensively, more comprehensively, and in a much shorter time.

It may be said that the Delsilife way as described may be cumbersome, slow, and totally unconventional, very different from what is done usually. All this may be true, but Delsilife gives the people the privilege of deciding for themselves what it is they would want to learn or undertake; it is perhaps what educators call relevant. As to its being cumbersome, that too is an aspect of non-formal education which cannot be eliminated - only minimized.

It is, in fact, through the relinquishing of the initiative by the non-formal educator (or bureaucrat) to the villagers that Delsilife is able to hasten the development process. For whereas in the normal bureaucratic set-up, a village may wait indefinitely for development to reach the place, under Delsilife a village meets, more than halfway, the flow of development. In effect, Delsilife causes sectoral development efforts to reach a village faster and more effectively.

Notes

1. Four countries participated in Project Delsilife: Indonesia, Malaysia, the Philippines and Thailand. Funding was received from the government of The Netherlands. In Phase B the participating countries gave counterpart funding. For Phase C, the implementation stage, funding from The Netherlands was mainly for the production of the Delsilife package.
2. The acronym 'Delsilife' stands for Development of an Effective Learning System for the Improvement of LIFE.
3. The term 'Learning Programme' was deliberately adopted to emphasize the educational nature of Delsilife.
4. Each country participant in the development of Delsilife produced its own package which it will try out on a larger scale in different communities. Following this, INNOTECH will produce a more generalized model for wider dissemination and implementation.

Section II

Education and Culture

5.

Culture and Education: Education as the Agent of Transfer and Change

Leo F.B. Dubbeldam

This article explores the inter-relatedness of education and culture inspired by the notion that people have to learn throughout their lives to become a total person ('learning to be'). Culture is transferred from generation to generation through education, but not in a static way, due to acculturation and creativity. The article discusses concepts of culture, the inter-relatedness of cultural elements, cultural identity as well as change.

Education is more than what is offered at 'school' and school education cannot be studied without due attention to the other forms of education. There are discrepancies in the objectives and expectations of authorities, educationists and learners as to the appropriateness of the curriculum content. Questions are raised about who decides on the content, its relevance, and the values to be conveyed, how to reach specific groups with suitable programmes, etc.

These and other questions are dealt with in this article. It concludes with some topics for future research and touches upon problems in research.

Five billion learners

At the moment our world is inhabited by some five billion people. If one could observe them from a distance, as through a space telescope, all these creatures would look quite identical. Focusing in on them, one would notice some differences in their shapes, some are taller or bigger than others, have longer hair, or move slower or faster than people around them. Finally, however, if one could observe all these people individually, more closely and for a longer period, one would discover many more differences which really make them individuals, not only physically, but especially in the way they behave, feel and think. Yet, at the same time one would discover certain similarities between some of them, as each one shares some features with a number of others.

All living creatures in this world, as soon as they have been born, behave according to the pattern that is particular to their kind. They react to their environment instinctively and immediately. In addition to such basic and instinctive behaviour, the young creature has to learn, through example or trial and error, other behavioral skills in order to survive, grow to be an adult and reproduce.

Young human beings, born in a particular place, will show certain patterns of instinctive and automatic behaviour that are typical of the human kind. Yet, slow developers as they are, they have to be taken care of and have to be taught a great deal to survive as adults in their natural and social environment. A facilitating, but also complicating, factor in this process is the human propensity to think in abstract terms, in symbols, in abstract ideas and to think in advance. This ability allows a person to learn without actually experimenting, experiencing or imitating a particular situation or form of behaviour. On the other hand, it takes the human being many years, if not his whole lifetime, to master the skills, behaviour and attitudes required to survive satisfactorily within his natural and social environment. What one observes is that people, as a result of this learning process, come to reveal mutual differences or resemblances in certain types of behaviour, skills and attitudes.

Culture

We distinguish human characteristics that are natural, inherited and inherent to a particular kinship group, from features that are the result of a learning process and are shared with a particular group of people living in the same place, of the same age or interests etc. These not naturally inherited behavioral features compose what anthropologists call 'culture'.

There is a multitude of definitions of culture. Kroeber and Kluckhohn (1952) have collected and analyzed 164 definitions. The authors often stress those features that suit their reasoning. Others have almost given up, saying that culture is a term not susceptible of definition (Katoke, 1982). Linton wrote, in his *The study of man* of 1936 (p.411): "Culture as a whole consists of the sum total of society's patterned responses to its needs." In his study on cultural anthropology and education Camilleri (1986:14) defines culture as "the more or less consistent set of the most enduring and most widely shared acquired significations which the members of a group, because of their affiliation to this group, tend to apply systematically to stimuli from their environment and from themselves, assuming towards these stimuli common value attributing attitudes, representations and behaviours of which they try to ensure the reproduction by non-genetic means."
His definition comes close to the one chosen as a point of departure for this symposium, based on Linton's definition of culture formulated in 1945 (see Linton 1964:21).

However, in Linton's definition the concepts of change and development were not explicitly mentioned. Later anthropologists have criticized his definition as being static. For some time there was a difference between certain cultural anthropologists who described societies/cultures as something idealistic and static, and sociologists who stressed change, as a realistic disruption of social life. As we see things now, no culture has ever been totally static, though in some societies changes were slow because there were few challenges or changes in the natural or social environment. With growing intercultural contacts and communication cultural change became inevitable, in some cases dramatic. Yet, this process of acculturation was not the only reason for changes in the pattern of culture through time. Another, very important one has been the creativity of the human being.

For our discussions culture has been defined as "the configuration of learned behaviour and the results of behaviour, whose component elements are shared and transmitted by the members of a particular society, in a continuous process of imitation and intended transfer as well as of adaptations and alterations as a result of its changing environment and its members' creativity" (CESO Position Paper, p. 25 of this volume).

Interrelatedness

When we speak of a configuration of cultural elements this implies that there is a close interrelation between the various elements in a cultural pattern. This implies that any changes, like (old) elements fading away and being replaced by new ones, also affect other elements. New elements may not be adjustable because they infringe on other elements, or may find no firm base due to a lack of affinity with existing elements. Also, some existing ones, which do not really conflict with new ones introduced into the pattern, may hang on even though their original and likely logical places in the system have faded away. Anthropological studies cite examples of elements of a culture that have ceased to function because another element had been changed.

Interrelatedness implies that elements of a culture can not be static, nor transferred automatically. Although people behave in the way they have been taught, their pattern of behaviour or culture may change in the course of time as a result of changes and challenges in the environment which demand new responses, or through the human abilities of thought and creativity. In the course of time, a culture may change as people consciously or unconsciously alter, drop, neglect, or introduce elements. In some instances such mutilations have led to a total collapse of the whole culture and even disappearance of a society.

More often than not the members of a society are unconscious of alterations in their culture. Groups that are isolated from the mainstream of their culture will in due course show a different behaviour, even though they may deny this, claiming that their behaviour is similar to that of their forefathers before the separation. Only when changes are drastic and sudden will the members of a particular society become aware of the change and regret or welcome it.

Both natural differences (like physical appearance or place of residence) and cultural differences (language, dress, custom) make some people different from others. The number of cultural traits and elements shared with others differs as a result of various factors: distance, time, sex, age, occupation. Until recent history, geographical distance made contacts rare and as a result people far apart did not share many elements. More and more, however, distance becomes a relative concept. Increased travel, papers, radio and television and all the other media bring about contacts with people whose very existence was not even heard of before. On the other hand, people within one metropolis develop such different lifestyles, interests, occupations, and daily rhythm that they share fewer elements. In this way a large number of sub-cultures appear within a society. Most of these are based on one or two major elements, for example neighbourhood, language, or occupation. These cultural differences within society often stand in the way of a uniform and standardized system of education.

Cultural identity

Individuals belong to one or more social groups and they identify with one or more of the (sub-)cultures in society. Identification is based on sharing one or more cultural elements with others. In this respect people may identify with various sub-cultures simultaneously, according to different common core elements. Sometimes this may bring the individual into a conflict of loyalties when the norms and requirements of the different groups are mutually conflicting.

During the seventies the concept of cultural identity came up. It was the subject of many popular, scientific and political discussions. The concept of cultural identity operates on two levels, the individual and the societal. These are partly similar in nature, partly different in scale and function, and, finally, reciprocal.

On the individual level, cultural identity is the psychological recognition by an individual of sharing a set of fundamental behavioral elements with a number of other people, with whom a close relatedness is revealed, by which the rightful and appropriate position of the individual in human society is confirmed.

On the level of a society or group we find that the cultural identity of a particular society is the aggregate of specific behavioral elements which are recognized as representing the characteristics of the fundamental behavioral pattern of the members of that society, thus confirming the rightful and appropriate existence of that society and its members.

The search for cultural identity has become a trend in a world with increasing numbers of diffuse, often temporary, sub-cultures and a colourless but expanding superficial world culture which embraces elements randomly brought together from various cultures. Dissatisfaction and uneasy feelings as to which sub-culture they really belong to have led people to shape a new identity or search for their roots, hoping to find an answer to their problems there.

The nation-states, shaped during the 19th and 20th centuries, are composed of sometimes many cultural groups, differing in essential aspects like language, religion and economic interests. It seems as if individuals find more and more problems identifying with the nation and look more closely to the local, tribal group or even sub-cultural groups within it. Nation building processes in many developing countries in Africa and Asia have been hampered by this. But also other continents have their problems. In Europe there is, on the one hand, an effort to construct a political unit on the continental level, while on the other hand local cultural minorities demand official recognition of their identities. This should become manifest in greater political autonomy, often starting with cultural aspects such as a language and education policy, but also including economic affairs. In this respect nation-states face problems not only with historically settled populations whose forefathers have lived in the area for centuries, but also with increasing numbers of immigrant populations, whose second and third generations have firmly settled, sometimes in certain geographical areas.

Change

Cultures have always been subject to change, although change usually was slow. But the population explosion and increased communication brought about a wide-scale, intensive and sometimes aggressive transfer of knowledge, norms and values. In many cases it is a matter of one-way traffic, yet gradually counter-streams are coming up. The acculturation process has resulted in the disruption of cultures, in conflicts but also in assimilation and adaptation. New elements imported from another culture have not always been properly assimilated in the existing pattern. Old and new traits sometimes exist side by side, at least for some time.

Anthropologists have always made a distinction between ideal and real patterns in a culture. Often the new element enters into the real pattern, what people actually do, while the old element remains within what people name as their ideal pattern. New elements enter more easily into the material culture than into the system of values and norms. This means, for example, that certain equipment should not be imported without proper adjustment of the users' skills and attitudes needed in the production process in which the equipment is to be used.

Also, dual sets of attitudes can be distinguished in the same people, for example one set of attitudes in the 'new' work or school situation and another in the 'old' home environment.

Education: learning to be

Education is the process through which a newborn individual becomes an integrated member of his or her community and it is the main agent of transfer of a culture through the generations. It guarantees the continuation of a culture. At the same time, by stimulating and developing intellect and creativity, education promotes the development of an existing cultural pattern. Through education, the members of a society acquire the factual knowledge, normative systems and analytical framework which they need in order to live in that particular society. Human beings have become increasingly dependent on learning. They have to learn:

- adequate reactions to their natural environment;
- to behave as members of their community in various circumstances;
- the general and specific intellectual and physical skills needed for particular activities; and
- appropriate understanding of the natural and supernatural phenomena, laws and powers basic to existence (Faure 1972: 156,69).

Education relates to all aspects of culture, and people are engaged in it in many different ways, both as educators and learners throughout their lives. Education, consequently, has a wide variety of forms, contents and methods. Many languages have more than one word to indicate various kinds of education. In English, training, instruction, and schooling all differentiate the process and method of education. Unless specified, education is used in this paper in its broad anthropological sense, as a complex process of the transfer of culture. It includes what is contributed by an individual's parents, family, peers, or social groups in direct contact, or through formalized institutions like schools or training centres. It may even take place without direct contact between educator and learner, by such means as books, newspapers, radio or movies.

The sum total of all these efforts contribute to the moulding (*Vorming, Bildung, Pendidikan*, etc.) of a total personality, a 'complete (wo)man', who has all the potentials to live fully and satisfactorily in his or her particular society, unless one or more educational efforts are contradictory and conflicting. In the latter case the process may end in confusion, frustration, revolt or estrangement, but sometimes also in innovation.

The scope of education

There is still a lot of discussion going on about the concepts of 'education' and 'didactics'. From our point of view, as described above, education is as old as there is human culture. Carlos E. Olivera (1988:170), however, limits the system of education to a sub-system of the social complex, clearly not reaching beyond the school system. "From the standpoint of history, and to put it very succinctly: education as a specific social system in charge of a particular function differs from other systems in that it is not 'natural'; it was deliberately created by man. Before anyone had any thoughts on sociology, economy or politics, social distinctions existed; production and consumption of goods existed; power relationships existed, and so on. On the other hand, there was no education until someone started to think about it, unless we equate education to spontaneous socialization or to imitative apprenticeship, as some authors' sweeping statements seem to imply. Intentionality is an essential trait of education. (...) Although not spontaneous, then, education and educational institutions existed long before education systems. The most visible of such institutions, school, began with the invention of writing."

Not only does such a limited conception of education ignore the many ways of educating the next generation by other means than through the school system, it also puts writing at the base of education, which would imply that outside the realm of written knowledge no education is possible. Education in this limited sense will soon fail to meet the needs for education in the developing countries. Yet there seems ground to fear that such a conception of education has been basic to the introduction of education (read: schools) in many countries, ignoring other existing ways and methods of education in the society involved.

In the total education of a human being various educating agents or actors play complementary roles, both in a positive and in a negative sense. An individual gets his or her first education within the family group (parents and close relatives). The role played by each of these differs in each society, but broadly speaking each person knows what is expected of him/her. Roles vary according to sex, age, specific knowledge of the educator and the particular circumstances of the learner. All members of a community are familiar with the prevailing role patterns and they have gone through the same type of process. To a large extent education takes place on an individual basis and often through informal interaction. Not every 'teaching' act is intentional. Often only the proper learning situation is created. Education operates through listening, talking and questioning, through observation and action, example and imitation. Education is not only 'teaching'. This is only one side of it. The other is 'learning', an act in itself, sometimes quite independent of (intentional) 'teaching'.

Educators have certain objectives in mind, but are also aware of the various stages in an individual's lifespan and of the individual's peculiarities and specific circumstances. In some cases this may lead to stricter rules and a more specific content. In general, however, especially young learners are allowed margins of error that in some cultures are very wide. Children are allowed or forgiven many things that are not tolerated in adolescents or adults. Special situations, for example games, are created for learners to experiment with, under special conditions without serious punishment for failure. Reactions of group members to a particular act differ culturally from great permissiveness to immediate and severe correction. The role and influence of peer groups gradually increases as the individual grows up. By participating in such groups the individual learns particular styles of behaviour, skills and attitudes, initially at least in a permissive atmosphere.

The smaller a society, the more likely it is that members will have some ideas about what can be learned in each of the learning environments. Problems arise when societies grow and new sub-groups come into existence, or existing ones change their norms and values too quickly for others to keep themselves informed or to be able to manage them.

School

At a certain stage in history parents and close relatives did not have enough time to teach children, nor did they have the skills and knowledge to teach particular subject matters. They then delegated a supposedly well defined part of the education of their children to specialists and professionals. This led to the phenomenon of 'school'. Furthermore, the store of knowledge in society increased and was differentiated so fast that parents were no longer fully informed about what was taught at school. More and more they lost sight and control of the contents of school education. Decision making gradually came to rest with authorities on a higher level in society. The fora in the local community gradually lost, at least partly, control of the curriculum, which was now determined by a distant authority.

The role of the parents, local and central authorities differ for each society. The school system normally forms part of the total administrative systems. In many countries policy issues, also in education, are decided by a central authority and not by the community. The role of the parents, for example in the form of parents' committees, rarely reaches beyond certain social and organizational affairs.

Much teaching and learning, however, goes on outside the formal school system. Private, often religious, organizations have long played an important role in education on all levels. Their role in primary education has decreased in many countries, but is still very much alive in pre-school, special, vocational, and various forms of adult education. These types of education are not only opportunities for skill training but also for forming values and attitudes in the learners. Here lies a potential conflict between the central government, local authorities, the community, and the parents.

It seems as if adult education and non-formal education are almost the only opportunities of the community, of the learners, to have a say in the objectives, the contents and the format of a particular curriculum.

Objectives and expectations

In the national formal educational system the objectives are usually determined by the central government. They are the expression of what a particular group feels the objectives and contents of education, which normally implies school education, should be. The objectives reflect on the one hand an ideal image of the citizen of that society and ideal ways and methods to educate the (young) people. On the other hand they are, at least in their implementation, supposed to be in line with the dominant political philosophy and practice in the country and the political interests of the leading groups. When the central authorities have a strong grip on society, many of their objectives may actually be translated into curricular practice. Depending on the nature of a government and the position of ruling political parties, religious and economic powers, the objectives are based on the values of one or more sub-cultures to which the leaders of the country belong.

On a different level the content of education is coloured by the social and professional ideals of the educators, often the teachers in the system.

Within, and sometimes outside, the margins given by the political authorities they can design and prescribe a curriculum that fits their ideas and implement it.

Finally there are the objectives, or rather, expectations, of the learners, the pupils, and if the latter are still young, their parents. Since most people have children, we might as well speak of the community. In many countries parents send their children to school either because doing so has become part of social life, because it is fashionable, or just because it is compulsory. Yet, given the enrolment, attendance and drop-out rates, schooling does not seem to be a normal and self-evident activity. It might be said, very generally, that this is the more so for specific regions or countries. There is also a marked difference, in this context, between various sub-cultures within countries.

Expectations are mostly based on the question what can be achieved; what will be the improvement in the quality of life. This holds both for formal school education and, maybe even more so, for evening classes, correspondence education and other forms of adult education. In the first place, especially in areas of durable poverty, school education can be a way of escape from an undesirable situation, to higher income and social status. The ideal is the sub-culture of the 'educated' people in better positions in society. True, when asked to formulate their expectations many will pay lip-service to the official objectives such as 'to be good citizens', or 'to help the development of the nation.' Some really do appreciate the intrinsic value of specific skills such as understanding the national language or reading, writing and arithmetic. But the most general desire is that the children will reach, through schooling and one or more diplomas, a better position in life. A place in a wealthier social group, a higher socio-economic sub-culture, is the general aim, even though at the same time many have their doubts about the social attitudes and moral norms that are considered to be characteristic of that other sub-culture. In principle the school can provide the knowledge that leads to this goal and some of the norms and attitudes that go with it. And what the school does not achieve will be reached by imitating the superficial visible forms of the desired sub-culture, often without sufficiently internalizing those elements.

There is a vast amount of literature about what is known as the 'diploma disease' and many politicians and educators have expressed their horror at it. But few of their efforts have been able to wipe it out. The ideal of politicians and educators that school education should serve the development of the country rather than the individual, to stop migration from the rural areas to the cities etc., is not automatically shared by the people.

One may wonder what the objectives of the people are. A materially better position, prestige, power, these are some of them. But together they cannot add up to what might be named 'the other way of life', 'other' implying 'better'. It is described and felt in many different ways. For example, in the novel *Leopard in a cage* by Jacqueline Pierce (1976:2-3), we find the following discussion between some of the characters. A film producer named Nsa, dissatisfied with his work in the city, returns to his village to work there. He gets into a dispute with his wife who does not want to stay in the village. He asks her:

> *'Are your roots so bad that you want to escape them?'*
> *'I simply want to rise above the filth here.'*
> *'What's wrong with progress, Uncle Nsa?' Marangu joined in the conversation. 'She's simply talking about progress. Look at Walter Mtey. He was the first student from Lomo to study at the University. If he had come back here to live and work, people would have been disappointed.'*
> *'Even if he could have done more meaningful work with his skills here in Lomo? Would people have been disappointed if their lives changed positively as a result of the use of his skills here?' I tried to follow Marangu's logic.*
> *'Don't you see what I'm saying? The people here like to read about Walter in the newspapers - see his picture from time to time. Then they sit back contentedly and say "That's our boy. He's from Lomo." They don't care about his skills. They just know that he's their big man in the town.'*
> *'That's foolish.'*
> *'Why is it foolish? When I finish my studies I'll never come back except to visit from time to time. Think of all your classmates. You were the only one to get a chance to study in America. Yet you're the only one without a car, without a house, without even a job. And why? Because you wanted to come back to Lomo.'*

The expectations of many in the first place reveal the desire to share the socio-economic advantages and to escape from rural poverty or too strong family ties. On the other hand there remains a certain nostalgia for the 'traditional life in the village'. It is intriguing that the number of success stories of people who, through school education, have reached the better life desired, has decreased. A school diploma no longer automatically leads to a job, higher prestige and better material conditions. Unemployment is increasing and even higher diplomas are required for a particular type of job. Surely people are not unaware of this. Maybe there is an unconscious feeling that such things happen to others, but not to oneself.

Relevance

During the last twenty years especially the 'relevance' of education became an issue, mostly in terms of the applicability of skills and knowledge in daily life and particularly in the work situation. The discussion relates mostly to the relatively recently introduced school education. The formal educational systems of many developing countries have been copied from systems in operation in the Northern countries and were often introduced during colonial times. But we may as well extend the discussion to the question whether 'traditional' education was always relevant in all its aspects. Were there not, in the traditional indigenous forms of education, also many elements that lacked relevance, in the sense that the content was not applicable or was far removed from the reality of life? Was it not sometimes discouraging to the learners' inquisitiveness and creativity?

If the subject matter is to be beneficial to the learner, we must consider its relevance also in terms of the wider context of a culture and its values and norms. Unfortunately these considerations enter the discussion too rarely.

Officials and educationists agree that education, and especially school education, should prepare young people for life within society. But the question is which society: the one of today or the one of tomorrow? Furthermore, do we understand the society of today and do we agree about its positive and negative assets? And what will society be like after ten or twenty years or, at least, can we agree on how we want it to be? We may agree on the skills that are useful today, but which ones will be needed later? More importantly, which values, norms and attitudes will not only be desirable but also useful in the future? Can we equip people, especially the youth, with such desired values and attitudes? Or should we concentrate on qualities that enable them to face fast changing situations in general, qualities like creativity, flexibility, tolerance, initiative or aggressiveness? If so, how to do that?

As stated, school education is expected to prepare children for life in their society. But often the societies concerned are characterized by terms like 'competitiveness, diploma-disease or rat-race'. Should the school, therefore, not provide them with such abilities that they can survive in that society and make them fight their way up as far as possible? For, if the school does not, the youth might lack the required skills and attitudes and consequently lose the fight. Partly the solution should be found within the curriculum of the school or other educational programmes for youngsters. But simultaneously, the educational efforts should be directed towards the society at large, to the adults, politicians, employers, and educators themselves, within the context of the prevailing and changing cultural pattern. The school alone will not be able to achieve the objectives set.

It is disturbing to listen to educators and officials talking about the irrelevancy of school education and the youth merely aiming at getting white collar jobs. Because, was that not what they wanted themselves years ago and have achieved, given their present relatively comfortable positions? In order to be convincing and for the sake of credibility they had better be modest and offer proper alternatives to the youth of today. But can they?

Value education

In the stream of fast cultural change in most societies educationists are faced with a difficult choice among the many new and old values to be brought into the curriculum. It is felt by many that today's youth has no values anymore, in any case not those once held high in the community. There is now a discrepancy between the values of the older generation and those of the youth, as well as between various sub-cultures. Therefore more attention has to be given to value education. But the major question is: whose values?

The discussion on value education shows a certain nostalgia for the familiar old values prevailing before society changed into the present situation. It seems to be hard to understand that the new generation of today has new values or at least is on its way to find new ones. Cultural values have always been changing and every generation again questioned the ones found with its successors. A fact is that as society changes new values have to be found fitting the new cultural situation of today and tomorrow. Values concerning a wide range of new developments and concepts are introduced and have to find their place, possibly after modification, in the existing cultural pattern. Such concepts that are widely spread into various cultures, but may not automatically have the same content and value, are for example: democracy, production, profit, time, co-operativeness, solidarity, family planning, the relations between men and women, the position of women in society and many more.

It seems that it is very difficult for people to try and understand the values of other sub-cultures and especially the younger generation. Yet it is important that such a search and dialogue is stimulated in order to result in new inputs in the curriculum.

The most basic values and norms of behaviour are learned in the home situation and in basic school education. This can be both secular and religious education. For this reason many governments have nationalized primary school education, in the first place in order to teach children essential cultural assets such as the national language, religious and political concepts, nationalistic feelings, etc. Most of them have dispensed with foreign teachers.

The policy on value education may serve conservative, innovative or revolutionary objectives. A successful implementation requires full co-operation by motivated teachers who share the advocated values or who at least are willing to transmit them to their pupils.

On higher levels of formal education foreign teachers are still very common in many countries, especially in subjects like science and technology. A problem for them is to teach skills and attitudes linked to the previous learning experiences of the pupils, in such a way that they match the value systems of the learners and are relevant to their work and social life.

The issues of values and relevance also play an essential role in international education. In interviews with former participants in international courses in the Netherlands ex-students often state that they have not only learned something from the lectures and practicals, but also from extra-curricular activities, from their fellow participants and by observing colleagues in the Netherlands at work and in daily life. Also, research attitude, methodology and the use of information are considered as important as factual knowledge. Often, they have become more aware of their own professional capabilities. A good deal of the benefit of international education seems to exist in the general and professional cultural exposure next to improved skills and knowledge.

Education for specific groups

With the recognition of the specific characteristics and educational needs of specific groups in society, more attention is given to meet their needs through various forms of education. This concerns many large and small groups in society: women, ethnic groups, workers and migrants. A problem here is that education for these groups has to be directed at the formal recognition of their specific place in the cultural context of society, and in particular their social and economic position. It aims at raising among the people concerned an awareness of their capacities and at installing new values and forms of behaviour that may help them find their place in society. Often this results in other groups feeling threatened in their previously dominating positions.

The need for special attention for these groups is more and more acknowledged and taken care of. However, the question is whether such programmes should not be made parallel or connected to programmes for the other groups in society, whose values and behaviour have to change accordingly. If they hold on to the old values, behaviour conflicts between the two groups are inevitable. For example, educational activities aimed at the improvement of the position of women in society should be accompanied by complementary programmes for men or for mixed groups. The same goes for ethnic groups, migrants and workers. If this is ignored there is the danger of special attention for one group evoking resistance among the others, which will prevent the achievement of objectives.

Research

Education is both the agent of transfer of an existing culture and an instrument of change. The balance between the two is crucial. Education is composed of many complementary forms. The formal school system is one of them, strongly related to and dependent on other forms and situations of learning.

Learning starts immediately after birth and lasts throughout a person's lifespan. As a consequence both practitioners and researchers should always keep this complex in mind even when focusing on one element only. For example, primary education is always influenced by the home situation and the various media etc.

In this respect researchers could be asked to pay more attention to the reciprocal influence of the various forms of education. This may reveal which particular skills, values, attitudes can best be dealt with by a specific programme.

It is interesting to note an increasing interest in, and appreciation of, indigenous learning processes. Initiatives in this field need to be continued. In general there is a need for more research in the field of learning processes.

There is still little experience in participatory research, an instrument that can be particularly useful in exploring the cultural context of learning needs and processes, as CESO experienced in its work on the project in the Amazon region in Colombia.

More study is also required into the use of appropriate means. Educational equipment, including learning materials and methods, cannot be transferred to another culture without proper research; not just testing the need for such materials, but also asking for what purpose use will be made of them and how people can use them. Do the materials match the attitudes of the users, their perception, concepts etc.? It seems that too little research and experimentation has been done in this area.

In many developing countries research is hampered by a lack of funds, research capacity, adequate documentation, methodology and exchange and dissemination of research results. This includes the communication between researchers, practitioners and authorities in the appreciation of needs, agreement on priorities, allocation of funds, complicated systems of research permits and the presentation and use of results.

Research into the cultural aspects concerning education and into learning processes may not immediately lead to concrete and applicable results, such as some types of skill training research can. Nevertheless it is useful to call upon governments and donor agencies to give more attention to this kind of research since it is basic to designing curricula, teaching materials and methods, and, ultimately, to improved efficiency and impact. It is hoped that initiatives like the World Decade for Cultural Development, declared by the United Nations, the Literacy Year, and the conference on 'Education For All' will stimulate attention for the cultural dimensions in education.

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6.

The Application of Research into Indigenous Knowledge and Learning; Some Problems

Adri Kater

The author presents his reflections on the relevance and usefulness of social research for intervention agencies, in particular with regard to indigenous knowledge and learning systems. A clarification in terminology of scientific and indigenous knowledge is presented, followed by a distinction of different types of situations in which research results may be applied in action programmes. Finally the article discusses the specificity of indigenous knowledge and learning and the implication this has on its application by intervention agencies.

Researchers are, generally, convinced of the usefulness of their research. However, many researchers complain that intervention agencies do not listen to them and many intervention agencies complain that researchers present too late reports that are too long, too difficult and not relevant to the agency's action.

The problem of the application of social research has often been discussed and, especially during the last decade, efforts have been made to solve these problems. Chambers (1980) launched his 'Rapid Rural Appraisal' and has known many followers.

The problems around the application of research into indigenous knowledge and indigenous learning have been discussed in a regional workshop in Cha'am, Thailand, in March 1988.[1]

The following pages contain reflections on some of the issues that were discussed there, finally focusing on the question: Who will do what, with what kind of research results?

Terminology

Many discussions could be shorter if the participants would agree in advance on the meaning of the terms they use. This is seldom the case, and often meetings fail to reach agreement mainly because the participants refuse to 'go into semantics' and let the discussants continue to use terms without attaching the same meaning to them.

It is, indeed , very difficult to make discussants agree on the significance of the words they use. Often people appear to agree about the significance of a term, while in fact they disagree completely.

The opposite also occurs. Sometimes people try to find a term for certain phenomena, but cannot agree on the most appropriate one. This is especially the case when words are used that also have a meaning in everyday language.

The term 'indigenous' suffers from both ailments. Over the last decade the concept has been used by many social scientists and other students of developmental issues to connote something that is different from the 'modern', 'formal', 'scientific' or 'western'. Different synonyms are used, like 'traditional' or 'informal'.

Jeremy Swift (1979: 41-43) for instance, speaks of 'traditional' when he wants to describe "the body of knowledge, science and techniques used by rural people" as opposed to "modern knowledge: the body of knowledge, science and techniques arising essentially from the European scientific revolution of the 17th century."

It seems that Swift is in between a definition of indigenous knowledge based on concepts and principles derived from the history of knowledge, when he refers to Galilei, and a sociological definition, when he refers to 'rural people'.

Hereafter we shall use a sociological definition, however interesting the historical and philosophical questions may be.

We therefore will not try to find any essential difference between two or more types of knowledge or even science, but ask ourselves if there is a difference between the knowledge available among intervention agencies, and knowledge available in their target group, and what that difference is. Before looking at this target group, where we hope to find 'indigenous knowledge', let us look at the intervention agencies.

What intervention agencies have in common is that they dispose of and manipulate a stock of knowledge that is derived from research, experiment and more or less arbitrary, hypothetical or visionary ideas about developments as they take place or will happen in the future. This stock of knowledge is constantly evaluated and reformulated. Communication, often world-wide, between intervention and research agencies has an important role in these developments. The actors in such an intervention system are not always aware of the total complex in which their work fits, and only seldom to the trends of thought they are subjected to.

Interventionists work at different levels and have well-defined roles, which may differ according to their specialisations. On the research level the actors create new knowledge, at the policy level the decisions are made about what knowledge to use and in which way, to reach the aim of the intervention organization and to influence the target group. At the level of the field agents, well-established packages of knowledge and skills are handled by the agents to transfer knowledge and skills to the members of the target group. What these levels have in common is the language, the professional jargon of the organization.

This is the type of knowledge we generally call modern knowledge, it is the knowledge that is part of the 'modern' sector of society. This does not imply that there is unanimity about this knowledge: there are schools of thought and different convictions about methods and paradigmata.

Still we can safely speak about modern scientific knowledge as one type of knowledge. This modern knowledge can, however, not be contrasted to only one other type of knowledge, 'the' traditional one. There are many types of traditional or indigenous knowledge, as there are many social entities with a sufficiently homogenous culture to be different from others. These are not necessarily rural cultures, nor are they restricted to the so-called developing countries. It may even be preferable not to oppose 'scientific' to 'other' types of knowledge, but to recognize that scientific knowledge at best only exists within the context of the development of the science concerned. Most users of drugs, for example, trust their doctors who prescribed these drugs and the pharmacists who made them. They do not know what happens in their bodies when the drug is used. Doctors do know, up to a certain extent. As long as this knowledge is in line with the latest developments of medical science, we may call it 'scientific'. What is called scientific today may, however, not be recognized as such tomorrow.

Instead of drawing a line between scientific knowledge and other knowledge, we would therefore prefer to use the expression 'knowledge in its cultural context'.

Research results

We may distinguish different types of situations in which research results can be applied in action programmes. The differences are due to the structural relations between the researchers and the intervention agent, and to the relations between these two and the target group of the intervention.

A well known situation is when the researchers work independently, write their reports and present them to the general public, including the intervention agents. This kind of research is often undertaken by universities or research institutes. For them, it is the research itself that counts, its application is a by-product. It aims at the solution of academic problems, at contributing to the development of (social) science.

The theoretical framework of the research is related to paradigmata and schools of thought of the social sciences. Depending on its theoretical background, it aims at explaining, at showing interrelations or even causalities. There is always a descriptive part, but this is subordinated to the academic aim: the testing of hypotheses.

Although the researchers sometimes hope that the outcome of their research may lead to (improved) action, they do not consider the construction of models for action as part of their research.

The results are presented in a terminology that is sometimes hard to understand by outsiders. Often the intervention agents consider these results to be 'interesting' but irrelevant to their work.

In the sixties, a general concern about the repeatedly disappointing introduction of innovations that seemed technically sound led to different new approaches, in which it was tried to include all non-technical aspects.

Purely scientific research was considered to be unsatisfactory by many social scientists. The responsibility of the social scientist for the use that is made of his research became a regular topic of discussion and many researchers felt that they should not restrict themselves to research but should take the responsibility for action. This let to the vogue of 'action research': the researchers no longer limited themselves to studying existing situations, but introduced action to improve these situations. At the same time, more and more researchers, as well as interventionists, became convinced that the subjects of their research (or the target group of their intervention) should participate in the research, and in the planning and implementation of intervention activities.

The concepts 'action research' and 'participatory research' were born. There are, however, different degrees of participation. In research, for instance, participation can be limited to fact-finding, but can also include problem definition and the formulation of the research results. In the last case, it is probably no longer the academic relevance that counts, but the social, as seen by the group that is subject of the research. (Some researchers may insist that this is then necessarily also the academic issue).

Also some intervention agencies have shown interest in a participatory approach, but not seldom only limited to attempts to make people participate in activities they have planned for them, in a traditional top-down approach.

In rural development, the farming systems approach tries to integrate technological, physical, sociological and economic factors. It is hoped that this will lead to the development of more effective intervention approaches.

Although social aspects are taken into consideration in this approach, it is essentially agronomic in character. In most cases it is a top-down approach.

The most successful participatory action research projects are probably those undertaken by research institutes, in most cases on a small scale. They are 'projects', not routine activities of an intervention agency. Experimental in character, they benefit from a differently motivated and highly qualified manpower input. Being limited in duration they do not develop an 'intervention bureaucracy' with its fields of competence, working routines, hierarchy etc. Eventually this means that they cannot be replicated on a larger scale. The input of the academics is probably greater than their philosophy would allow.

Intervention agencies have, in most cases, research built into their programmes. Often a special research unit is created within the agency. Applicability is not a by-product, it is the aim. This research is, however, often of the survey type, it is then an inventory of the socio-economic situation. The application of this type of information is to be found in the use that is made of the data. These data have to fit into the model for action designed by the intervention agency.

There is a fundamental difference between, on the one hand, the deductive, analytical and explanatory approach of anthropologists and sociologists, and on the other hand, the normative approach used by extensionists, educators and other interventionists. The social scientists work deductively, construct an explanatory model that is based on facts. The interventionist constructs models for action and needs facts to fill them in.

The user-orientation

The most important potential users of research results on indigenous knowledge and indigenous learning are the intervention agencies. Intervention has been defined as: "A systematic effort to strategically apply resources to manipulate seemingly causal elements in an ongoing social process, so as to permanently re-orient that process in directions deemed to be desirable by the intervening party" (Röling and de Zeeuw 1983).

It is essential that the intervening party should not belong to the group in which the intervention takes place. The aims of the intervention agencies can be very different: the introduction of certain crops, higher yields of certain crops, a higher standard of living of certain target groups, improving the food supply of the urban population, suppression of certain crops etc. Another distinction that can be made is between approaches and methods used. Over the last decade several extension and other intervention agencies have developed specific intervention systems, like the Training and Visit System, the Rural Animation approach, the progressive farmer approach and many others. Some of these approaches differ more in theory than in practice. The development of 'participatory' approaches has already been mentioned. But even in these cases there are always outside intervention agencies that want to help people to discover their own problems and stimulate them to solve them. They (the intervention agencies) do so because they believe it is good for the people, and will in most cases withdraw if people want to do things that are unacceptable in the philosophy of the intervention organization.

Intervention agencies can roughly be divided in governmental, parastatal, NGO and commercial organizations. They can be product-oriented, people-oriented or area-oriented. This indicates the agency's objectives. To achieve these objectives they may choose a different orientation. For instance, an agency that aims at improving the standard of living of a certain target group may do this by trying to increase the yields of the crops that these people produce. An organization aiming at the introduction of a certain crop may do so by organizing the producers.

The different types of intervention agencies all have to do with people, so we may assume that information about the relevant indigenous knowledge and skills may be useful to them.

It should be kept in mind, however, that every intervention organization not only tries to achieve its official objectives, but is also an organization that wants to survive and to grow. It establishes certain working rules and habits, spheres of competence, staff regulations. These aspects should be kept in mind when the application of research results by that organization is discussed.

Application and specificity of the results

Another problem to be faced is the specificity of conditions. Since research into indigenous knowledge and indigenous learning has been defined as research into the cultural context of knowledge and learning, it is necessarily specific for certain socio-cultural situations. As anthropological research it tends to focus on such specific situations and to stress the uniqueness of each particular situation. Often anthropologists explain why things are as they are in a certain society and show the interdependence of different aspects of a culture, without bothering too much about general conclusions that can be drawn from their studies.

To those who want to stress the uniqueness of each culture, generalizations imply a loss in the real value of each specific culture, and comparisons are only interesting where they show differences, not where they arrive at generalizations.

From time to time, however, generalizations are made, based on comparative research, that appeal to the anthropologists. These generalizations are also abstractions, often phrased in a terminology in which the subjects of the research would not recognize themselves. Where applied research is concerned, however, the generalizations should fit into the interventionist's frame of reference.

The use the intervention agency makes of the research will be found in the formulation of its policy, in its staff guidelines, its handbooks and extension material.

These policies and guidelines will not be formulated or developed for one small village only, but for a whole country or at least for a region which comprises hundreds or thousands of villages. The generalizations, therefore, are to be found on this level of intervention. This is not only the case for social science research into indigenous knowledge and skills, but also for agronomic research, as certain crop varieties may be suitable for certain specific ecological conditions.

Intervention agencies look at the cost and benefit of research. They cannot afford research whose results are applicable in one small community only. Therefore, research into indigenous learning is doomed to remain an academic exercise only, unless it can either lead to generalizations which are applicable to a sufficiently great area or target group, or to the development of research methods that can be applied by less qualified researchers, for example the staff of the intervention agency itself.

One of the most successful types of research was done in colonial times by British anthropologists employed by the British colonial administration. This administration was based on the so-called 'indirect rule'. The indigenous power structure was not replaced by a colonial one, but the latter had merely a supervising function. Indigenous rulers maintained their position in the Native Administration, and indigenous law was maintained by the Native Courts. In order to find out about these legal rules and power structures, the British made use of anthropological research which led to the establishment of rules recognizing traditional administration and justice, creating Native Courts with hierarchical levels of authority. This does not imply that this type of administration was a 'good' one from an ethical or even administrative point of view. It only shows that anthropological research was in fact applied by generalizations from, time-consuming, case studies made by academically qualified anthropologists.

Nevertheless, it will be very difficult to convince intervention agencies thinking in terms of 'projects' which should lead to substantial results in three to five years (which most of them do) of the usefulness of this type of research. On certain occasions they may even be right, because in some areas change takes place so fast that long-term research can only lead to results that are outdated at the moment of application. In other areas, however, little change takes place. But these are usually not the areas in which governments or intervention agencies are especially interested.

Chambers proposed to distinguish between 'long and dirty', 'quick and dirty' and the 'fairly-quick-and-fairly-clean' research approach.

The solutions may have to be found in two directions. The first is to persist in the effort to find generalizations of the middle range level through a 'relatively quick and relatively clean' method.

The second is the indirect way in which no technical information about indigenous knowledge or learning is presented, but in which guidelines are given for intervention agents to help them find out on their own that kind of research that will supply them with the relevant information for their other activities. It cannot be predicted which will be the most effective.

The first will probably be restricted to a limited number of topics and be less appropriate for research into indigenous knowledge and indigenous learning.

In the second, certain skills and attitudes among the agents are necessary, skills and attitudes that still need to be acquired. Moreover, they will need time to do this. It is essentially an effort to improve the quality of the intervention agencies' policy and staff. Research in that case should not limit itself to the society that is the target group of the intervention agency, but also include the intervention agency itself as a subject of research. For instance, it should not only critically ask what farmers know and how they know it, what they do and how they do it, but also what extensionists know and do, and why they do it. Such research should not only consider the official policy documents and guidelines, but especially the working practice of the extension service.

In either case the application of the research results, which may be the development of policy guidelines and the training of staff, is to be part of the research itself.

Final remarks

Researchers should never overrate the possibilities to change fundamentally and directly the approach of intervention agencies. In spite of this, four ways of using the results can be foreseen.

1. The building of theories which may finally lead to a change of policy at the highest levels. It seems unlikely that organizations responsible

for action will finance this type of research.

2. The investigation of indigenous knowledge and learning in specific geographical and/or cultural settings, tuned to the interest of intervention agencies working in the given area.
3. An input of research results in the training of intervention agents at all levels in order to raise their awareness of the importance of indigenous knowledge.
4. The development of guidelines with which the intervention organization's staff itself can do the relevant research.

Note

1. The regional workshop on 'Indigenous Technological Knowledge and Skills' took place 2-5 March 1988, in Kanchanaburi (Cha'am), Thailand, and was jointly organized by CESO and the Chulalongkorn University Social Research Institute (CUSRI), through funds from IDRC and CESO.

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7.

Case Studies on Indigenous Learning Systems: Implications to Formal and Non-formal Education

Eligio B. Barsaga

As part of an INNOTECH Research and Development project, four case studies were conducted to describe and analyze systems of indigenous learning of communities in the Philippines, Indonesia and Thailand. This paper gives a summary of the research findings, discussing for each case the objectives, the methods and techniques of learning, the transmitters and receivers of knowledge, skills and values, and the content and context of learning. In a later section the results are synthesized into general characteristics of the ILS. On comparing these with the characteristics of the formal education system, the author advocates a mutually reinforcing integration of native and new learning systems which might lead to a more acceptable and better quality of rural education.

Background and rationale of the ILS Project

The INNOTECH[1] Research and Development Project, 'Using Indigenous Learning Systems (ILS) to Improve the Quality of Education in South-East Asian Communities'[2], of which the conduct of pilot case studies is the first phase, addresses the problem of seemingly poor quality and irrelevant education in the deprived communities of South-East Asia, where education has contributed to the aggravation of problems associated with low quality of life of the people. School-based education, and even non-formal education, in these communities was seen as unresponsive to the needs of the people: in some instances it was perceived as a nuisance, an unnecessary intrusion into their social lives. This negative perception toward education is partly attributed to poorly designed curricula, culturally insensitive instructional approaches, methods, and techniques, and materials, and to the inability of school administrators and teachers to adapt education to the community's structures. Accordingly, the convincing and holding power of schools have not been strong enough to prevent students from losing interest in schooling, resulting in high absenteeism and dropout rates. Even non-formal education seemed to have failed in enticing the people to avail of learning opportunities for personal, socio-cultural and economic advancement (SEAMEO-INNOTECH, 1988).

In response to this educational problem, the ILS project in general aims to make education contribute to the uplift of the quality of life of the people in the deprived communities by

1. improving the delivery system of education for rural development, making use of indigenous learning systems; and by
2. grafting or integrating the formal and non-formal learning systems on/with the community's indigenous structures, customs and practices (SEAMEO-INNOTECH, 1984).

More specifically, the ILS project would explore the use of ILS or part of it in strengthening the convincing and holding power not only of formal education but also of non-formal education as well. An integrated community-based learning system designed and developed with the results of the case studies as primary inputs has been viewed as a promising solution to the problem.

This paper, however, will only dwell on the first phase of the research and development project, the case studies and their implications to improving the delivery and quality of formal and non-formal education. The second phase, the actual implementation of an integrated community-based learning system which would have resulted from and followed the case studies, is still on the drawing board, and therefore will not be discussed in this paper. The first case study is reported in some detail; to avoid repetition, other case study reports are less elaborate, discussing briefly the particulars of each ILS.

Summary of case study findings

Case study 1: *Indigenous learning systems among the Kankanaey (Bennagen 1985)*

Objectives

The ILS of the Kankanaey is aimed at the material and ideological reproduction not of a sector of that society but of the whole cultural system. It draws upon the entire range of life experiences and formalizes these in the rituals. The ILS is one holistic experience in terms of personnel, paraphernalia, methods, goals and rewards. In particular, the *dawak* (ritual feast) is holistic in that it combines affective, normative and cognitive elements in one sustained event. It draws together kinsmen, peers and friends and other members of the whole community. Moreover, it strives at consistency by relating goals with actual economic opportunities.

Transmitters and receivers of Knowledge, Skills and Values (KSVs)

Transmitters or teachers/trainers and receivers or learners/trainees vary in relation to the stages of enculteration. Primary enculteration (0-6 years old) has family members, primarily parents and other adults, as transmitters of basic knowledge and values that are considered good. Learning takes place in the household and in the yard. It is here where breast-feeding, toilet training, language learning and getting to know the members of the household and how to relate to them occur.

Secondary enculteration (7-adolescents) has to do with the acquisition of behaviourial patterns appropriate to age and sex. The males learn economic skills from their fathers, the females from their mothers. They also learn other skills from peers and older persons of either sex. Appropriate social behaviour patterns are learned from peers during play, work and in the *dap-ay* (male clubhouse), *bub-unan* (convivial gathering place), the yard and in the house.

Tertiary enculteration (marriage-death) involves consolidation of social status based on a number of things including economic position, and political and ritual skills. Elders, ritual specialists and peers function as transmitters of KSVs not only in the house but in other extra-familial institutions like the *dap-ay*, *bub-unan*, school, government, church and other community-oriented centres.

Modality of learning (methods and techniques of transmitting KSVs)

Indigenous learning among the Kankanaey is accomplished with methods and materials that appeal to and involve individuals, families and the entire community. At the individual level - both of teachers/trainers and learners/trainees - learning is multi-sensory. The senses are stimulated to operate not separately but in their interactive totality, involving fully the affective and cognitive faculties. Moreover, the economic and social rewards are immediately real and accessible to the community.

The place of the *dawak* and the *dap-ay* in the learning system is very significant. In the *dawak*, routine or ordinary events and information (local history, kinship and geography) and social values are represented in a ritual context. This transforms this routine and ordinary information into new information which upon re-entry into the everyday world are expected not to be forgotten and thus be obeyed or re-internalized. Kinship obligations and social values as well as economic abundance and good health are highly valued and emphasized as such.

The ritual world represented by the *dawak* is normative, affective and cognitive. In its concentration of ordinary events, life becomes a spectacle described in a combination of ordinary speech, metaphor, song and dance which are re-learned with greater efficacy. The topics of discussion during the ritual and several days afterwards indicate that this re-learning has indeed taken place.

The *dap-ay*, a public building built by the community, has several uses. It is used as sleeping quarters for unmarried males and a meeting place for the village elders and the younger married adults. It also serves as a learning institution, a venue for secondary and tertiary enculteration.

At night, the young boys and the bachelors go to the *dap-ay*. The older ones, already lying on the floor, ask the younger ones to scratch the soles of the older ones' feet. Through this relationship, the younger ones learn to be obedient. Before the boys fall asleep, they exchange a lot of information, ranging from personal adventures to economics, local history and current events in the community and outside. They sing Ilokano, Tagalog and English songs.

A number of other activities take place in the *dap-ay*. It is a centre of community feasts. It is also a tribunal where community decisions regarding cases of individual or group violations are reached. Moreover, it is a counselling and discipline centre where recalcitrant male youths are brought by their fathers for group counselling and disciplinary action. The technique of group discussion of the boys' behaviour is more effective than parental counselling. Disciplining a child is the responsibility of adults and is done in enlightened self-interest. Among the more specific teacher-learning strategies and techniques are:

1. learning by listening, seeing and doing, by imitation and repetition using instructional tools needed for participating in day-to-day life;
2. use of ritual such as the *dawak*;
3. group discussion and problem solving;
4. role modelling;
5. peer-group learning;
6. through poems, songs, dances and other forms of oral literature;
7. the use of community-oriented learning institutions and other convivial places (*dap-ay* and *bub-unan*);
8. learning from village elders as individual and collective teachers;
9. use of immediate social and economic rewards;

10. use of multi-sensory, everyday life materials and tools that develop the affective and cognitive faculties.

Contents and context of learning

The foci of the Kankanaey's ILS include learning general and practical knowledge (e.g. local history, kinship, geography, oral literature, natural and social environment); political, economic and social skills (e.g. capabilities needed to acquire and consolidate a position of power, to meet requirements for survival, or to develop socially acceptable behaviour needed of the group living); and values needed in the reproduction of the culture. Contents of learning are less structured. Most learning is not time- and place-bound and is characterized by informality on the part of the teacher as well as the learner.

The settings in which teaching and learning take place varies with the phases of enculteration. In primary enculteration, it is limited to the family, household and kinship settings. In secondary and tertiary enculteration, the setting expands to include convivial places, workplaces and extra-familial, extra-kinship and village institutions.

Both the physical and social settings reinforce the process of learning due to their appropriateness and relevance to the social lives of the learners, facilitating the handling and processing of new knowledge and information.

Case study 2: *The indigenous learning system of the Bagobos of Davao (Gloria, 1986)*

Religious beliefs, values, social organization, practices associated with the rites of passage, oral traditions, child-weaning and child-rearing practices, courtship/marriage/divorce practices, and death/burial practices are the veritable sources of learning inputs. The syncretic worship system called *Langis* or *Lanahan* serves as a source for a value system that continues to be inspired by an ancient ideology. This ancient ideology has continued to prevail because it is one that is expressive of the special relationship between the Bagobos and their physical environment.

The social structure as a learning institution or a source of knowledge has continued to perform traditional functions as evidenced by a pattern of political leadership that is evocative of the old *datu* system. In this system, a political superordinate exerts a sort of 'remote' and intermittent authority over a widely scattered following.

There are two broad categories of transmitters of knowledge, skills and values: formal and informal teachers. The first group is composed of authorities such as the village elders, *barangay* (village) captain and other local officials, parents, grandparents, priest and pastors, the *mabailan* (midwife) and *hilot*, and other local leaders. Among the informal teachers are peer groups that may consist of friends, relatives or classmates.

Practical or technical knowledge is taught directly to learners by teachers who have continued to make use of their knowledge (e.g. by a blacksmith or a midwife).

Other than direct instruction or face-to-face mode of communication, the indirect methods for transmitting KSVs vary widely and, as is common in many cultures, they have a wider range and acceptability. Bagobo folk heroes and older mythological characters provide insight as to the qualities which are considered ideal and therefore meet with approbation in the cultural context.

The methods of learning by observation and demonstration are freely used, given the practical nature of indigenous learning activities. The blacksmith, for example, in explaining to his learner-son or apprentice the process involved in cutting and hammering a piece of metal into a knife or farming tool, goes through all the process himself as the learner sits in front of him observing closely.

The system of reward and punishment is considered an integral part of teaching. Material rewards are given to children for 'doing it right', obeying parental counsel or wishes especially in the fulfilment of tasks and expectations. These material rewards, however, are not the only form of gratification. Family order and harmony, and community approbation are the social equivalence of these rewards.

The importance of the setting may be illustrated by this incident. A local *panday* (blacksmith) who was personally interviewed could hardly express himself in reply to the questions, but when followed to his backyard where his makeshift forge was, he became very articulate and exuded a superiority of knowledge. He was able to explain in great detail how the apparatus worked.

An informal setting facilitates free communication, and hence, the acquisition of learning. Formal settings such as the *barangay* assembly, church services or the *langis* rites, are appropriate for 'serious' business or activities (e.g. the *langis* rites for satisfying certain religious obligations or obtaining healing and medicinal cures). The learners come to the place already conditioned and attuned to the kind of information they expect to hear, see and apprehend. The further processing of the input is subsequently conducted in less formal settings: the political and economic situation may be more discretely talked about in the relative privacy of the home, under the trees, or in other traditional gathering and meeting places (e.g. waiting sheds, barber shops, small stores); local and national issues may be discussed among cockfighters during the Saturday *tabu*; the womenfolk may exchange bits of news and opinions on laundry day at the Baracatan river or at the front or backyard of an informal woman-leader's house.

Case study 3: *Indigenous learning system: a case study of Srikhirimat, Thailand (Saisang, 1987)*

The oral folklore and social folk customs as enculturating institutions or sources of knowledge and values served as the foci in describing and analyzing the indigenous learning system of Srikhirimat. Oral folklore as described included lullabies, folk-tales, legends, folk speech, proverbs and riddles. Social folk custom includes recreation and games (*tee jab*) and the ordination of monks. Instruction may be given directly as well as indirectly.

Oral folklore as vehicle for learning has for its main goal the reproduction or transmission of indigenous culture. It helps a person give vent to suppressed feelings, become familiar with certain beliefs and practices, and learn social problems and their ethical solutions. Didacticism is an important aspect of their intrinsic nature, and the people themselves often expect to find moral issues in folk-tale - which are a pseudo social norm for the villagers. Besides, it serves as a form of entertainment.

Folk speech enables children to learn the language of their culture. The correct usage of words or expressions relative to the social level of persons being talked to is strongly emphasized. Riddles are used to motivate youngster to think wisely or cleverly, confusing or testing the wits of those who do not know the answer.

As in oral folklore, social folk custom is aimed at cultural reproduction or transmission. In the case of recreation and games the main objective is enjoyment.

Ordination as a form or rites of passage enables young men to get acquainted with the ethical precepts and principles of Buddhism with a view to developing them as mature and responsible members of the society. The ordination ceremony is a learning experience in itself, resulting in acquisition and internalization of cultural values.

Mostly, adults are transmitters of knowledge and values using oral folklore and social folk custom. In some instances such as in folk speech, recreation, games and riddles, children and youth are the teachers of their peers.

Among the more prominent adult transmitters are the Buddhist monks, mothers and fathers, story tellers, village elders, news carriers, and oral historians.

The use of informal and unstructured settings such as small group discussions, story-telling sessions, peer-group interaction and one-to-one communication characterizes the ILS based on folklore and social folk custom. Learning or education in general is also acquired through informal means - that is through daily interaction with people, young and old, and with the social and economic environment. The informality of the setting and the means by which the contents of the ILS are transmitted to a target set of learners suggest that the ILS is not time- and place-bound.

Held in very informal and unstructured physical and social settings, people may not be fully aware that teaching and learning take place as they interact or exchange ideas. The ILS is an integral part of their daily activities, acting as a social mechanism through which the culture of the people is passed on from one generation to another.

Case study 4: *Indigenous learning system of the Gayonese in the village of Bebesen, Indonesia (Melalatoa, 1988)*

The ILS was described and analyzed using the socialization and enculteration practices as the principal analytical framework. Its major goal is to develop good Gayonese individuals who possess sufficient knowledge, skills and values to promote community welfare. It is a social mechanism by which individuals are developed to become part of the Gayonese culture.

In the hierarchical Gayonese kinship system the active roles for transmitting KSVs are performed by the older family members. The father and mother, the older brothers and sisters, the clan leaders and elders form the core of teachers.

Outside the kinship group the religious teachers, village elders and informal leaders/teachers also educate the young. Religious beliefs, social organizations, mores, rites of passage, oral traditions, child-rearing practices, courtship/marriage practices, and the like are sources of learning from which the cultural value system evolves.

There are eight categories of cultural values held by the Gayonese and transmitted to the young members of the community: *bersikekemelen* (competitiveness), *tertip* (good manners), *seti* (loyalty), *amanah* (discipline), *mutentu* (diligence), *alang tulung* (helpfulness), *gimasih-semyang* (love) and *gerap mutakat* (deliberation). Self-esteem embraces the pursuit of all these.

Here, as before, various rituals, ceremonies and prayers are vehicles for the Gayonese traditional learning. Direct reprimands are given to the young who are being initiated into the socializing process. They are taught Gayonese values through lullabies. However, kinship terminologies teach them the constellations of family roles and statuses. Social pressure and sanction ensure that the norms and values of the community are preserved. Proverbs and adages are further means by which values are taught to the members. Koran reading enables them to learn the values of a Moslem society.

Informality characterizes the situation in which teaching and learning take place.

Conclusions

On the whole, the case studies revealed that ILSs are firmly embedded in the enculteration and socialization processes of the communities in which the cases studies were undertaken, and therefore are inextricably linked to the lives of the people. Their philosophy is founded on the need to maintain and preserve the identity of these communities through the preservation of their culture, to ensure their solidarity and continuity, and to prepare succeeding generations for their various roles in society.

Essentially, learning or education is integrated with the social, cultural, economic and political life of the community, with emphasis on practical learning. Children and youth are prepared for full and active involvement in the affairs of the family, clan and community through a learning process that reflects the real world.

ILSs are spontaneous, not sequential. Their emphasis is on lifelong learning rather than progression from level to level. The reward system is anchored on the intrinsic and social value of learning rather than grades, diplomas and certificates. Moreover, the delivery approach is basically non-formal and informal. Learning is delivered by social groups and is community-oriented and community-based; it is not focused on specialized knowledge.

The face-to-face oral method of teaching KSVs and the methods of learning by observation, demonstration, trial and error, imitation and practice are frequently used in ILS. Media employed in the educational process (e.g. myths, legends, tales and proverbs, rituals and ceremonies, games, songs, dances and plays) are the same vehicles that sustain the cultural life of the community. There is no dichotomy between tools used for learning and those needed for participation in the business of life.

The content of ILSs is diverse and is drawn from a number of subject areas useful to the family and society. It includes social skills, family, clan and community history, moral or value education, language, music and dance, religion, technical and economic education and recreation.

Because of the societal concern for cultural continuity, the principal focus of ILSs is on the learners' adaptation to existing conditions and way of life, often neglecting the future characterized by change. It thus fails to grow with the time since it does not provide room for new ideas and innovations. This conclusion agrees with the observations by Adams (1987) and Bangura (1987). Bangura believes that unless traditional education or learning accommodates new ideas, it will unavoidably fail to respond to the new emerging needs of the community that it serves.

Recommendations

A mutually reinforcing integration of the native and new learning systems, a special type of rapprochement and co-existence, is likely to result in a much more responsive, and thus more acceptable and better quality of rural education. I shall refer to this as an integrated community-based and culture-sensitive learning system that incorporates the following features:

1. The judicious adoption or adaptation of ILS or their components or elements that have been proved or are potentially effective in the transmission of acquisition of either native or new KSVs. For example, village elders and local teachers may serve as teachers/trainers or teacher aids after they have undergone basic training. The best part of the oral literature of the community can be used either as media or content of learning or both. Community-oriented centres such as the *dap-ay*, the *serami*, the *mersahe* and other local institutions and organizations can be tapped as venues for teaching and learning. Reciprocally, formal and non-formal education can be made to get actively involved in community events and ceremonies that are really participatory. Behaviour and discipline problems in school can be better approached through the community rather than individual counselling.

2. The collaborative planning, execution and monitoring and evaluation of the curriculum of formal or non-formal education, including the processes by which education is delivered, involving respected community elders, local experts in fishing, hunting or farming, ritual and local knowledge specialists, native teachers and the school administrators, instructional supervisors, teachers and trainers. If carried out with

community-orientation in mind, this collaborative strategy can be the answer to the mounting problem of alienation of education from the community of which it should be a critical part.

3. The use of local knowledge as learning contents, learning motivation medium or vehicle for introducing new knowledge and technology. This will transform education from one that denigrates traditional culture to one that revitalizes it. Revitalization, however, does not imply that all local knowledge shall be accepted and reinforced. The villagers should be encouraged to undertake scientific validation of indigenous knowledge vis-à-vis new knowledge. This way, the process not only becomes a new and productive learning experience for the rural people; it can also be an effective strategy in introducing new ideas, knowledge or technology with a minimum resistance.

4. The deformalization of instruction, particularly in non-formal education programmes such as rural extension work, life skill training and adult education, using local instructional media or communication systems that strengthen the community's cultural heritage and existing social institutions performing education and related functions.

5. A holistic approach that maintains the functional relationship between contents method, and objective. Learning, therefore, promotes not only the development of technical skills but also the deeply-cherished values of democratic participation, unity, co-operation, and education for community improvement.

Those designing this integrated community-based and culture-sensitive learning system should take great care not to use cultural elements and patterns to exploit and manipulate the villager. There is a serious ethical question involved here. We should also avoid falling into what Maseman (1982) calls the 'commodification trap', the packaging of this integrated system, for example, as educational commodities for wholesale application in formal and non-formal education by unsuspecting and uncritical educational administrators and bureaucrats, without due regard for historical specificity.

Indeed, a try-out of the integrated learning system proposed in this paper, both in formal and non-formal education settings, is essential for two reasons. First, we would not know the impact of the entire system on the quality of education in particular, and quality of life of the people in general, until a field experiment is conducted. Second, a well-planned try-out can anticipate problems in ILS implementation and come up with alternative solutions, and validate procedures that take care of the more sensitive ethical and cultural issues involved.

Notes

1. INNOTECH is the Regional Center for Educational Innovation and Technology of the South-East Asian Ministers for Education Organization (SEAMEO).
2. We wish to acknowledge the funding support of the Asia Foundation for the first pilot case study of ILS in the Philippines and the United Nations Development Programme (UNDP) for the succeeding case studies in Indonesia, The Philippines and Thailand.

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8.

The Thai Indigenous Learning System: its Significance in the Educational Process for Change and Development

Vichai Tunsiri

Education, in order to be effective, should be embedded in the cultural context of the society. Indigenous learning systems are part and parcel of culture; hence they should be incorporated, where possible, in the educational system of the society.
But what is meant by indigenous learning in the Thai context? Is there a difference between the traditional and the present-day indigenous learning systems?
What elements of these systems can be applied in the process of human resource development in the present day? What are the limitations? These are some of the questions explored in this article.

It is generally accepted that education may take place anywhere, within the school or outside the school, in the home, in the community or at the workplace. The educational process may be manipulated and managed, or it may follow its own natural course. What is less certain is the fact concerning its efficacy. We are not sure whether the present day schooling process, which tends to alienate pupils from their environments, and is not supported by or embedded in the learners' cultural environment, is adequate. We are faced with the problem of teaching Western democracy in a school in which the social environment is pervaded by autocratic practices. We have the problem of teaching management science with the emphasis on rational decision making processes in a society in which work culture is much more valued than economic productivity. To be efficacious, it is here proposed, the education system and process should be integrated with or supportive of the cultural environment, or vice versa. Since the indigenous learning system, to be presently defined, is part and parcel of the cultural setting of the society, it should be more efficacious in the educational process.

By indigenous learning system we mean the system of learning based on traditional practices and/or traditional media. It may include the present-day practices which are indigenous in origin. Therefore, new contents and new messages taught through the traditional media, such as folk plays, would be equally considered as indigenous learning. Vice versa, traditional messages and contents taught by the new media such as television, should also be considered as indigenous learning. With the modernization and acculturation process continuing over the last hundred years in Thailand, sometimes it is not easy to distinguish between what is indigenous and what is not.

All societies, whether modernized or less advanced, have their own indigenous learning systems. In England, for example, the apprenticeship training can be traced back to the medieval guild practices of occupational training which tended to keep occupational skills within the guild members' circle. In France, the value of the intellectual inculcation of school children is supported by the family practice of child rearing which gives an emphasis on being *'raisonnable'*. In a developing country like Thailand, such an indigenous learning system can be found in the practices of the temple schools, in the performing arts and music, in the agricultural practices and the traditional medicine production. The Delsilife project[1] is also partially an effort to utilize the indigenous learning system for modern purposes. Let us examine some of the practices, and consider their relevance to development purposes.

Early steps

In the traditional society of Thailand, the educational process for Thai children started at a very early age. In the first few months after birth, when the babies were put to sleep in a hammock, the mother and grandmother or the nurse would sing a lullaby. Apart from the music and the rhyme, the content might touch on the behaviour of birds (*nok paradok*) or other animals. The mother who sang a lullaby did not quite realize the significance of such practices since they had been handed down through generations, but the present day psychology has much to reveal about the educative value of such traditional practices.

Later, when the child was learning how to stand up, the mother and the more grown-up siblings might teach the child to do a simple performing art, by using hands to the accompaniment of a simple song (*Tae, tae chatae*). Thus, to the child the exercise of standing up was an enjoyable task, and not a hard labour to endure. This simple performing art was also indirectly taught with emphasis on the manoeuvring of the palms of the hands, a preparatory step to the subsequent training in dramatic art.

When the child grew up, he or she would be likely to accompany his or her parents to the temple every seventh day, the sabbath day, during the lentil season. There in the temple compound, the child learnt how to interact with the grown-ups and the social environment. The monks' preaching, which took place after lunch, might touch on different messages of Buddhist teachings and stories which were part and parcel of Thai traditional thinking. The temple also operated as the traditional school for children.

But, in this case, not all the Thai children in the traditional society would take up learning in the temple schools; only those who would become monks, or desired to serve the government. Such a temple school was a non-formal educational institution, for it did not formally organize any classes, nor did it set time schedules. A young boy who came to receive education could come at any time suitable for himself and suitable for teacher monks. Each pupil was given individual lessons. The teaching content would be largely reading and writing the Thai language, as well as the Buddhist Dharma. No vocational subject was taught as such.

This was the system prior to the introduction of modern education into Thailand, during the reign of King Rama V. However, even after the establishment of a modern schooling system in the middle of the nineteenth century, King Rama V, faced with the enormous task of extending primary education to the provinces, had to resort to monasteries as the places to organize elementary education for the masses. The monks were thus invested with the duties to provide modern education. The teaching manuals were written up and issued to them. This responsibility rested with the monks for a period of time, until it reverted to the Ministry of Education. Nevertheless, even up to the present time, when secular education is the sole responsibility of teachers specifically trained by the Teachers Training Institutions, many primary schools are still located in the temple compound.

For occupational training in the traditional society there were few schools for specific training. Each trade was the preserve of a family. In agricultural occupation, the younger generation learnt from the older generation through practical experience in the fields. In the cities and townships, trades and industries belonged mainly to the Chinese, and their children were trained in the family business. In the government services, the sons of the nobility or the gentry were taught the Thai language in the monastery school, and thereafter were recruited into the royal palace service corps as *Mahadlek*, if their fathers were influential enough, or else they might be recruited by the provincial nobility into the provincial services. These young government officials then learnt their jobs through practice.

In general, most occupational training occurred on the job. There were hardly any specific schools for occupational training, except perhaps the schools for sword fighting. Through literacy readings, it appears that some of these famous schools, called *Samnak*, often closely associated with the temple, would give training in the arts. Some of the more competent graduates from these *Samnaks*, once they were recruited into the military service, would be quickly promoted on account of their valour and fighting ability. Thus, the young enthusiasts from up-country would be attracted to their special *Samnaks*, since in the traditional Thai value system, the equivalents of the English knights would be those who were professional sword fighters, equipped with *montara*, which enabled them to escape from bodily harm inflicted by the enemy. (Even to the present day such a belief in the power of the *montara* persists, and the Thai soldiers who volunteered to fight in South Korea and Vietnam were reputed to have such *montara*. Hence the legend of the invincibility of the Thai military corps).

Beyond those aspects just described, the enculteration and socialization process in the traditional society and also at present occur through oral face-to-face communication by means of folk-tales and riddles. This is true for the performing arts also: the *Nang-Talung* (shadow play) in the southern part of Thailand tells epic stories to the night audience; the *Like* (folk theatre) in the middle part of Thailand is a kind of mobile theatre which plays stories based on the heroic exploits of past historical figures; and the *Lamtad*, also from the middle part, is a musical ballad band. In the *Lamtad*, the male and the female ballad singers carry on their witty scathing remarks in a lyrical impromptu fashion. In the Northeastern part we have the *Molam*, another version of *Lamtad*, but with a different instrument, different music, and different dialect and messages. These are traditional folk media which are still frequently called into service by politicians in electioneering campaigns.

Linking up

At the present day there have been suggestions about building linkages between the indigenous learning system and the modern schooling system. For example, at one time it was proposed that Kindergarten should be attached to the temple compound, to be run by monks; the rationale being that the religious atmosphere would have an influence on the children.
Those who are responsible for the civic subjects at the primary and secondary levels also talk about bringing in the monks to preach to the pupils from time to time (both moral and religious issues are normally

taught by laymen in our schooling system). In the non-formal educational programme, the Delsilife project is a good example of how the indigenous system can be applied in the development context.

These are some of the possibilities for integrating indigenous elements into the modern schooling system. Additional remarks are to follow below.

Society-wise one can observe phenomena of cross-cultural assimilation: the indigenous and the Western elements mingling in the popular arts, such as popular music and the visual arts. Most popular music in Thai society, particularly the so-called *Looktung* (country folk type), carry a message related to the lives of the ordinary people: the problem of a migrant up-country girl, the predicament of the migrant up-country boy who sells his land in order to go to Saudi Arabia, the life of the village boy working at the petrol station; all these messages appealing to the rural folk working in the cities. The music itself is also partially based on traditional music, whether of the North-eastern or the Southern varieties, but with a Western quicker rhythm suitable for the dancing step.

For the Thai who were brought up during the Second World War, this type of music is new. But for the present day teenagers, this is their daily bread of the ear. It could not be called traditional, nor could it be described as Western. It is the popular art of the present-day generation, a cross-breeding between indigenous and modern elements. Such a cross-breeding is also found in other spheres, such as in the visual arts, in technology, and in the social environment. It is apparent therefore that the process of social change which is grafted on or partially based on the indigenous roots, may be described as an endogenous process, as contrasted to the exogenous process, and is likely to be more sustainable as well as more relevant and appropriate for developing societies.

With such a hypothesis partially supported by evidence from social phenomena as observed, it can be proposed that the modernized educational process will be more efficacious if it is partially based on the indigenous elements. By indigenous elements we mean either the indigenous contents or the indigenous media and process, or both. Such a proposition will be more valid in the rural (hence more traditional) setting than in the urbanized areas. Let us further explore into some educational developments in Thailand, in order to gauge the significance of such a proposition.

New strategies

In the formal schooling system, there are at least two projects which might be considered as falling under this category of new educational developments. The first is the 'Extension of Educational Opportunities at the Lower Secondary Level Project'. The second is the 'Self-Employment Project at the Upper Secondary Level'.

(a) In the 'Extension of Educational Opportunities at the Lower Secondary Level Project', the essential idea and objective are to increase the rates of enrolment at the lower secondary level. Recently, for the last five years, the enrolment ratio kept falling or became static. It was the ministerial policy that the intake at the secondary grade 1 should be at least 50% of the primary school leavers. Since this policy was declared in 1983, the enrolment ratio stood almost constantly at 42-43% till 1986. All the officials concerned from the top to the grass roots level were frustrated by such a decline. Researches were done to investigate into the cause of this phenomenon and the results pointed to the same causes. The children who did not enrol in the secondary school beyond the compulsory level were likely to be those from a poor family, or whose parents wanted them to help with the house chores and earn a livelihood, or those who had to travel a long distance to schools, or those who were psychologically undermotivated. Thus, the economic, geographical and psychological factors are the key elements in this process. To these we should add the parents' perception and expectation regarding education.

The parents, in sending their children to secondary school, expect their children to progress in future, but the concept of progress is mostly associated with city employment, particularly in the government service. The parents in the rural areas are not convinced that education has anything to do with improving the productivity of economic activities at their levels. They do not recognize the economic value of further education in terms of earning a better livelihood in the rural setting. Furthermore, examples of those finishing secondary education who came back home without having gained any employment in the cities serve to convince them that secondary education is not very useful. This kind of perception, of course, does not hold true everywhere, but usually does in the case of parents who are either poor or uneducated.

With this background and these conditions, the 'Extension of Educational Opportunities Project' was conceived. Essentially it is to give free lower secondary education to the poor in the Northeastern provinces. The present secondary school still charges a fee for enrolment. But now the poor pupils would be exempt from tuition fees. Moreover, they are to be given free textbooks.

Another essential element of the new Project lies in the changing of the curriculum and learning strategy. The present curriculum is a comprehensive type of curriculum with both academic and vocational subjects being taught at this level. The new Project goes a step further by allowing a bloc of learning time to be spent outside the school premises, on farms, or in a nearby industrial enterprise, or on whatever work site regarded as preferable by the pupils. Such a practical work experience outside the school premises - perhaps two days a week - gives credit hours, and is counted towards the fulfilment of the required credit hours for completion of the lower secondary level.

It may be said that such a new learning strategy incorporates the indigenous learning system into the conventional schooling process. The Project has succeeded in attracting additional students to the schools - those who would not otherwise be in the schools. But it is not clear which factors lead to the success of the project, whether it is the exemption from tuition fees, or the flexible arrangement which brings in the indigenous occupational training system. Perhaps it is both.

(b) The 'Self-Employment Project at the Upper Secondary Level' was conceived at the same period as the first project - in 1986. This project aims at the upper secondary students. Its objective is to generate income through work and production in school, and to lead to the future self-employment of the students.

According to the present curriculum at the upper secondary level, students may choose different programmes, ranging from science, mathematics, humanities and social sciences, to vocational programmes in home economics, industrial arts, commerce and agriculture. The Project now introduces a new learning strategy. Those who want to join the project do not have to take vocational subjects in the prescribed manner of the syllabus, but can propose a project for work and production. This can be mushroom-growing, raising chickens, raising fish, etc. But whatever project a student proposes, he has to show how he would go about his business, including the search for credits. Once the project is approved, the students and their supervisor would interact throughout the three years' period of operation.

The learning of necessary skills, such as instrumental skills, in chicken raising for example, and other related skills, such as marketing, management and accounting, will take place on an ad hoc and piecemeal basis, as part of the production process. This may be called the integrated learning system, and actually reflects real life experience. Such a project may be regarded as incorporating certain indigenous learning elements into the conventional schooling system.

Not all students in the schools are encouraged to undertake such a project, only the more motivated. Only twelve schools were at first selected as experimental schools in the first year of operation. The evaluative result is expected in 1988.

(c) Apart from formal schooling, the non-formal schooling system may have even more possibilities to utilize the indigenous learning system. But we would single out the Delsilife approach as the example. The Delsilife project is based on the participatory approach. It is a community-based learning system, by which is meant any learning which occurs, will occur at the community level. It is also the community which determines what is to be learnt. The group process is thus brought into operation, generating local leadership and inter-personal social learning. External resources for problem solving would come at the request of the community learning group.

The Delsilife project is operating in the Philippines, Indonesia, and Thailand. Although the project itself took many years to reach maturity, its concept and approach have been tried under a different name in other communities. It is now also being extended to other provinces. Such a community-based approach to learning may be said to incorporate the indigenous learning process as part of the system. Obviously, new techniques, new information would be introduced, but they are all the more acceptable on account of being mediated through the indigenous learning process.

(d) Other examples of the utilization of the traditional media which lead to a measure of success can also be mentioned. One is the 'Eradication of Illiteracy Campaign' in Thailand, which employs all kinds of media to reach the rural masses, including folk plays.

Conclusion

From the foregoing account it can be concluded that the trend, both in the formal and the non-formal education system, is to introduce the indigenous learning elements into the learning strategies. Presumably, this innovation accounts for the success of the programmes. But evaluative follow-ups are necessary, with a view to improving the system or extending it to other programmes and projects.

In conclusion, it is reiterated here that the educational process, for whatever purposes, to be efficacious, should be rooted in the cultural environment of the society. In the case of a modernizing society in which a dichotomization may occur between the modern sector and the traditional sector, and where the modern schooling system is supposed to be the agent of change, it is proposed here that the indigenous element should be incorporated into the learning system as far as possible. As popular music and the popular arts in the modern Thai milieu seem to be based on a cross-cultural breeding, so in the educational process the integration between indigenous elements (whether through the contents and messages, or through the traditional media) and the modern technology and concepts, should lead to more effective learning and enculteration. It is therefore recommended that more research should be conducted into various aspects of the indigenous learning system, in fuller detail, in order to assess future possibilities for their integration into the educational system.

Note

1. For an extensive description of Project Delsilife, and the principles of the approach, see J.B. Socrates, 'Improving the quality of life: the Delsilife way',[Chapter 4 this volume].

9.

Traditional Learning: the Training of Dalangs

Soehirman Patmo

A description is given of the traditional training of dalangs (puppet players). In a situation where educational institutions are not available, traditional learning methods prove to be useful in the transmission of knowledge, skills and values.
The author argues that traditional learning methods are particularly effective as a means to transfer cultural values from one generation to the other, and pleads for further research to find out whether traditional learning methods are also relevant and applicable to modern, technical and western learning contents.

Traditional theatre as a performing art is a well-known extension technique in the world of communication. Traditional theatre is considered invaluable and recognized by institutions, national governments as well as international organizations as an effective instrument in propagating national development and related development programmes. For decades traditional theatre has been used in national campaigns on rural development, agricultural extension activities, family planning programmes and also for socio-political propaganda. This is reflected in the tremendous amount of research and studies which have been carried out to describe and assess the effectiveness and usefulness of traditional theatre for communication and extension purposes.

Another aspect which should not be underestimated is the cultural impact of traditional theatre. By using traditional theatre in development programmes, national governments aim at preserving the cultural inheritance for the coming generations. Moreover, traditional theatre is assumed to appeal more to local audiences, particularly to the majority of the population living in rural and semi-urban areas, which comprises the majority of the population in developing countries.

Since many studies are already available on the role of traditional theatre in the media and communication, this article will not elaborate on this theme (Epskamp: 1979; Kidd: 1982). The article will therefore focus on the traditional transfer of knowledge and skills in traditional theatre as a performing art. More specifically, the article will describe the traditional training[1] of the *dalang* (puppet player) of the *wayang kulit*.[2] The *wayang kulit* is used in this article as an example of traditional theatre. In many parts of the Indonesian archipelago wayang was frequently used as a tool for extension and propaganda activities during the colonial period, as well as after independence (Hadisoeseno 1955; Djawa 1921).

Wayang kulit (in this article further referred to as wayang) is an ancient form of Javanese traditional theatre known in Java and Bali as well as in Javanese and Balinese settlements in and outside Indonesia.

The term 'wayang kulit' combines two important Javanese words: *wayang*, which may be translated as 'shadow' and *kulit*, which means 'leather'. Hence wayang kulit indicates a form of shadow theatre performed with leather puppets (Ness and Prawirohardjo 1980: 7). The meaning of the word *dalang* is interpreted in two ways. One of the given meanings is 'itinerant', suggesting an itinerant performer, while the other connects the title of dalang to concepts of creativity and ingenuity, suggesting that the dalang is a man having skills in creation, also wisdom, the title thus having a connotation that inspires respect (Holt 1967: 132-133). However, for the general public the dalang is the player of the puppets in the wayang play.

The dalang and his wayang

Wayang is part of Javanese culture, although its appreciation by individual Javanese will vary from fanatic wayang lovers to those who know about it. About the origins of the wayang as shadow play there is still disagreement. Some scholars are of the opinion that it originated from South India, while others argue that wayang has its roots in Java. Nevertheless shadow plays seem to be known to exist or to have existed in many parts of the world, from the Eastern Asian region to the Mediterranean (Holt: ibid).

"The shadow play, wherever performed, is a superb medium for story telling. In each of the countries where it exists, it has acquired its own repertory and a distinct technique and style of its own. And the myths, semi-historical tales, romances, or satires that are brought to life on the shadow screen are at the very core of the people's culture. Thus, wherever its techniques may have originated, the Indonesian wayang kulit also is a uniquely Javanese and Balinese creation, in the form and context of its plays, in the style of its extraordinary puppets, and in the manner of presentation by the story teller, the 'venerable dalang'" (Holt ibid: 131). It is obvious that the dalang is the key person in a wayang performance. He is the narrator, he sings, jokes, cues the *gamelan* (the accompanying music orchestra), speaks for all characters and manipulates the puppets.

As also being observed by Keeler (1982), until recently studies of wayang have only focused on the following: 1. the description of the puppets themselves, their genealogy, and the setting and manner of performance; 2. a synopsis of representative plots; 3. discussion of the probable origin and purpose of wayang in the remote past; and 4. the role of wayang in extension and communication.

So far only Keeler (ibid) and Clara van Groenendael (1985) have made extensive studies of the role of the dalang, although from two different points of view.[3]

As mentioned before, the dalang is the key person in the wayang performance. The dalang is not only narrator and speaker for all the characters of the wayang puppets, but also their manipulator. In this connection Holt noted that the dalang is the central force of the wayang world. Playwright and producer, principal narrator and conductor, he is the creator and prime mover of the illusory shadow world. He transports his audience into the realm of ancient lore by the sounds of his voice, as he chants of remote kingdoms, the striving of the heroes, or poetically evokes sweet, strident, or ominous moods. He brings to life the puppets in his hands, making them seek, wander, grieve, and rejoice, and he speaks for each in ever changing timbres and accents (ibid: 131).

In the past the art of dalang was only transferred traditionally, whether from father to son or from master to apprentice. In Java and Bali nowadays the art of the dalang is being taught at special schools. The first dalang school was established in Surakarta (Solo), the *Padhasuka*. The second dalang school was opened in Jogyakarta in 1925, the *Habirandha* (ibid: 30). At present there are several dalang training schools, government as well as private.

Clara van Groenendael described the process of the traditional training of dalangs as follows: "once a boy is seized with the desire to become a dalang he will grasp every opportunity to attend a performance (...); a young man will enter the service of some famous dalang in order to become proficient at his trade. The apprentice's choice of a particular dalang will usually be based on admiration for the latter's specific skill of learning, which he hopes to acquire himself (...). In exchange for being a servant to the dalang the apprentice is given an opportunity to educate himself and to exercise his skills at his future profession. He will learn new stories, a different style of narration, his guru's specific mode of singing or a different technique of manipulating the puppets. He will often be encouraged to learn to read and write the Javanese script in order that he may acquire a more profound knowledge of the stories independently (...).

As soon as the pupil begins to feel that he has nothing more to learn from his guru, he may start out his own (..) usually, however, he will find another dalang to apprentice himself to for a while (...).

The fact that a dalang has begun to give independent performances in no way means that he has also completed his training (...). Some dalangs have many teachers, from each of whom they will copy those aspects of his style and technique that most appeal to them" (Groenendael 1985: 23-29).

The traditional training of dalangs in Bali as described by Hinzler (1975) is quite similar to that in Java, with some minor differences in details due to the historical development of the wayang in Bali as well as different socio-religious environmental setting.

The knowledge and skills of a dalang should at least contain the following (Groenendael 1985; Hinzler 1981; Holt 1967; Kats 1923; Ras 1976):

1. knowledge of the history and stories of the plays (basically the Hindu epos *Ramayana* and *Mahabharata*);
2. the musical knowledge, which implies understanding the music, melodies, modes and phrases and the ability to conduct the gamelan orchestra which accompanies the wayang performance;
3. mastery of the chanted recitation accompanied by the music of the gamelan orchestra; rendering good dialogues and correct chants of the dialogue in old Javanese language according to the 'levels' appropriate to each of the many wayang figures during the performance;
4. mastery of the techniques and art of puppetry (*sabetan*, which requires skilful handling of the puppets, such as dance movements of the various puppets during a dance, battle posture and individually characteristic appearance;
5. production of a harmonious performance, which includes a balanced interrelationship between story, music and correct timing, ability to catch the mood of the audience and to have a continuous hold of their attention during the performance.

Holt also noted that "the dalang, apart from his skills must have great endurance, traditionally a wayang performance starts after sundown and lasts without interruption until sunrise with the dalang as sole performer never leaving his place. During the whole night he sits cross-legged on his mat before the white screen (*kelir*) illuminated by a lamp which hangs above and little forward of his head" (1967: 133).

The requirements of a dalang are complex and varied. Usually it takes years before a dalang has acquired the basic knowledge and skills of the art.

Nevertheless, before the dalang schools were established, dalangs were trained through the traditional method, without attending formal dalang training schools.

Traditional dalang training: two case studies

In Java and Bali nowadays would-be dalangs can attend a dalang training school to obtain theoretical and practical training in the art and profession of dalang.[4] Although recent studies indicating exact numbers and percentages are not known, it appears that there are still many dalangs who have never attended a formal dalang training school. This means that there are still dalangs in Indonesia trained through the traditional method. I will illustrate this by presenting two brief case studies of two dalangs from Surinam.

Nearly one hundred years ago (1890), the first Javanese immigrants arrived in Surinam as indentured labourers,[5] bringing with them their Javanese culture from their country of origin. They also brought the art of wayang to their new homeland.

Unfortunately no records are available to trace back the number of dalangs who came to Surinam as immigrants in a time span of approximately fifty years, from 1890 to the beginning of the World War II. In interviews with two dalangs from Surinam now living in the Netherlands, five names were mentioned, three of whom are well-known to the Javanese community. Dalang Dikan, dalang Tarmidjo and dalang Sardono are legends to the Javanese community. The latter is the only dalang from Java still alive in Surinam, although he retired a long time ago.

At the moment there are about ten Surinam-born dalangs, the majority trained in the art of dalang by the Java-born dalangs. What follows is the story of two dalangs now living in the Netherlands, namely dalang Sastro and dalang Kasran. They were both traditionally trained by their respective teachers.

Dalang Sastro was born in the district of Commewijne, 59 years ago. The village where he grew up was a typical Javanese community, a former plantation with a predominantly Javanese population. His parents came from Java, working as indentured labourers at the former plantation. At home and in the community the Javanese language was spoken. Javanese cultural activities were organized regularly, particularly during festivals, which have specific meanings in Javanese culture, Javanese performing arts such as *wayang kulit*, *wayang wong* and *ludruk* were often performed in the village.

When a little boy, dalang Sastro was already fascinated by wayang and gamelan music. At the age of ten he seriously started to play the instruments of the gamelan orchestra. Older musicians were eager to teach him to play the instruments. From then on he was always present during gamelan and wayang performances which were held in the village. At his age he was also impressed by dalang Dikan, who lived in a nearby village. When he was older, he attempted to attend all wayang performances given by dalang Dikan throughout the whole district and thus developed a love for wayang and wayang stories (*lakon*).

When he moved to the capital city to find work, his main hobby remained the playing of gamelan. At the age of 23, he was asked by dalang Kamirin to become a permanent member of his accompanying orchestra.

Dalang Kamirin was an old friend, born in the same village and Sastro's former gamelan teacher. Dalang Kamirin was trained by dalang Dikan and dalang Sardono. As a permanent member of dalang Kamirin's gamelan orchestra, Sastro had the opportunity to accompany dalang Kamirin as well as dalang Dikan and dalang Sardono during their performances. After a certain period he knew all the wayang stories performed by the three dalangs. For twenty years Sastro was a gamelan musician for the three dalangs, ten years of which he worked for dalang Kamirin.

It was Kamirin who once asked Sastro whether he was interested in becoming a dalang. He expressed his interest, so he received instruction from dalang Kamirin to watch and listen more carefully when the dalangs were performing. He was also given a book with wayang stories, brought all the way from Java by the dalangs. He was instructed in the skills of the puppetry as well as recitation. Singing was not a problem for him; he got singing lessons from his father, who also had a book of Javanese songs from Java. Sastro's father was also a performer in traditional theatre, the type known as 'wayang wong'.

To exercise at home, Sastro bought wayang puppets and a screen. He trained with gamelan music played from a cassette-recorder as suggested by his teacher. He frequently sought the advice from his teacher concerning the structure of the wayang stories and the timing of a performance. Besides his own teacher he consulted dalangs Dikan and Sardono particularly on the mystical aspects and the language used in a performance.

Sastro gave his first performance 25 years ago, when his teacher granted him the honour of giving an opening performance of one and a half hours. By then he was 34 years old. After this very first performance he gave several other opening performances under the guidance of his teacher. Although dalang Kamirin was his main teacher, dalang Sastro also learned a lot from the dalangs Dikan and Sardono.

Currently Sastro is giving wayang performances in the Netherlands, either during Javanese family festivities or for the general public, such as recently at the Ethnological Museum 'Nusantara' in Delft, accompanied by his own gamelan group. He has also been to Indonesia, visiting Jogyakarta and Solo to attend wayang performances, as well as calling on several dalang schools. He used these opportunities to make contacts with dalangs in these two cities as well as to buy Javanese books on wayang so as, he said, "to improve and enhance my knowledge".

The story of dalang Kasran is a bit different. Dalang Kasran was born in 1924 in the Nickerie district, known as the rice district in Surinam. His parents were also indentured labourers from Java arriving in the beginning of this century. His interest for gamelan music and wayang started quite early, due to the fact that there was a dalang in the family. Dalang Tarmidjo, who also came from Java, was his uncle. From early childhood on he was familiar with the world of wayang and gamelan, since he was always present when his uncle was exercising. At the age of ten, Kasran was already skilled in playing several gamelan instruments. His uncle taught him how to play the *kendang* (drum), the most difficult instrument of the gamelan orchestra. Before the age of 14, he already belonged to the permanent orchestra which accompanied dalang Tarmidjo. Due to Kasran's increased interest and love for the wayang, his uncle started to introduce him into the art of dalang. He was instructed to the art of puppetry, in recitation and in cuing the gamelan orchestra. As a musician, playing mainly the drum (*tukang kendang*) and accompanying his uncle during all the wayang performances, he began to know all the stories performed by his uncle. His uncle also lent him the wayang story book brought with him from Java.

In addition, dalang Kasran was trained by his uncle in carving wayang puppets. In Surinam dalang Tarmidjo was known as the only dalang who made his own wayang puppets, not only for his own performances, but also for other dalangs. By learning to carve wayang puppets Kasran began to know each puppet by character, name, colour, genealogy and their specific roles in the various wayang stories.

Kasran was 18 years old when he gave his first performance, an opening session (*mucuki*) during a performance of his uncle. He then became his uncle's assistant for almost two years. Dalang Kasran can still remember his first performance as an independent dalang. In the village of Laarwijk he was asked by the owner of an old wayang collection to repair and repaint all the puppets. After he had finished the job, the owner organized a wayang performance at his house and dalang Kasran was asked to be the dalang on that occasion.

Dalang Kasran was also one of the few dalangs in Surinam who had *pesindhèn* (female vocalist's) in his accompanying orchestra.

The stories of dalang Sastro and dalang Kasran are illustrations of traditional learning methods in the art of the dalang. Both have been effectively trained in a traditional way, far away from Java, the place of origin of the wayang and the dalang schools. The training enabled them to acquire, preserve and transmit an important part of Javanese culture to the younger generation. However, unfortunately the interest in wayang in general, both in Java as well as in Surinam, is declining.[6]

Hinzler (1975) and Keeler (1982) mentioned in their studies the individual drives to become a dalang. These are 1. family tradition (genealogy), the knowledge and skills being transferred from the older to the younger generation within the family (e.g. father to son); 2. a personal interest in wayang and in the art of dalang; and 3. encouragement by friends or community, who observe some talent in the person.

In the case of dalang Kasran, obviously his interest in the art of dalang and wayang was aroused by his uncle. Whether there had been dalangs in the family in Java was difficult to trace. Dalang Sastro, on the other hand, was encouraged by his friend and teacher, dalang Kamirin. Nevertheless their own interest in wayang and in the art of dalang was the main motivational factor.

Traditional learning and culture[7]

From the anthropological point of view, education can be defined as cultural transmission, while culture itself is often defined in educational terms as 'the shared products of human learning.' Thus cultural transmission includes both the transmission of tradition from one generation to the next, and the transmission of knowledge or cultural patterns from anybody who 'knows' to anyone who does not. In this a distinction can be made between enculteration as the process of generational continuity and acculturation as the process of individual and group change, caused by contact with various cultural systems (Singleton 1984: 27-28).

Besides being part of culture, education is also interrelated to all other aspects of culture and people are engaged in it in many ways as educators and learners throughout their lives (Dubbeldam 1984: 16; Kater 1984: 23). We can therefore say that educative processes which take place in family, in peer and in social groups, and which mould perspective, shape character and determine behaviour are one dimension of cultural learning and thus take place in all societies (Dubbeldam: ibid; Kimball 1973).

If a distinction is made between traditional education and modern education, we may assume that the aim of traditional education is to conserve and protect the inherited culture. By focusing on the methods of traditional education, the emphasis will clearly shift to their effectiveness, the final result of the transfer of knowledge, skills and values.

Majasan (1975) argues that traditional education concentrates on competence in practical skills and attributes greater value to results and hard work, while modern education stresses theoretical competence and encourages more reliance on paper qualifications. This of course is only partly true, since modern non-formal education (e.g. vocational training) also emphasizes practical skills. We should be careful not to stress too much the aims, since also the methods need to be considered.

Kimball (1973: 227) noted that the educative process, in order to be effective, depends upon the learning process, that is the internalization and ordering of experience by the individual. According to Kimball, in societies where education is not institutionalized, it will result in the repetitive recreation in each generation of those experiences which resemble the preceding. To me this argument is also applicable to many modern learning situations. Kimball continued that the teacher-learner relationship is only crucial in a complex (modern) society. Here the opposite is also true. In traditional learning situations there is more intense contact between learner and teacher. This simply means that the learner cannot afford to be on bad terms with his teacher. Moreover, cultural values and the socio-cultural environmental conditions will not only define, but also have a significant impact on the relationship learner-teacher. The complexity of the society is just one aspect. In general, the methods used in traditional learning situations will strongly depend on the given socio-cultural condition and thus also on their effectiveness. Our main question is: what can we learn from the traditional learning methods?

Faure (1972) noted that the implications of the scientific and technological era are that knowledge is being continually modified, while innovations are updated. It is therefore widely agreed that education should devote less effort to distributing and storing knowledge, and more to mastering methods of acquiring it (learn to learn). Faure continued that in the case of artistic education this can and must assume another function; it is a means of communicating with the natural and social environment, of understanding it and, the case arising, of protesting against it. This element has so far been little more than timidly approached in educational practice (1972: 67).

Traditional learning methods, as illustrated, are effective in the transmission of culture and will perpetuate in many societies. However, the usefulness and effectiveness of traditional learning methods in the transfer of professional skills are still an open question. Should we focus more on the methods rather than on the aims of traditional learning? In this connection the Delsilife[8] project is an example from which we may learn.

Concluding remarks

Traditional training of dalangs as illustrated can still be useful and effective. In a situation where educational institutions are not available, knowledge, skills and values can be transferred through traditional learning methods. Hence our question is: what can we learn from traditional learning methods?

Although not exactly the same, traditional learning has much in common with indigenous learning systems[9] and it is therefore interesting to mention another assumption from the Regional Seminar on Indigenous Learning Systems. "There are elements that could be drawn from such indigenous learning systems that could make current learning procedures more relevant, both in the formal and non-formal areas of education" (Report of Proceedings 1981: 9).

In (traditional) learning there are three important elements: methodology, contents, and aims, which should not be mixed-up. Methodology relates to methods and techniques, the contents refer to the message, while aims give an indication of what should be achieved. If we are more concerned with the positive elements of traditional learning, which can be relevant for current learning procedures, our attention will focus mainly on the methodological aspects.

For the training of dalangs, traditional methods still seem useful, but the contents and aims of this particular learning process are, respectively, traditional theatre and the preservation of traditional cultural values. In this context, culture and education are strongly interrelated. To what extent are traditional learning methods relevant in the transfer of modern technological and economical knowledge and skills ? And are traditional learning methods applicable to the learning procedures of today? Only further empirical study could give us more insights and answers to these questions.

Notes

1. Traditional learning/training is being defined as the traditional way of transferring and acquiring knowledge, skills and values, outside the formal (and non-formal) methods of education. In other words the education process outside the regular class-room (curricular) environment.
   Please also refer to an assumption of the Regional Seminar of Indigenous Learning systems, which is more or less related to our definition of traditional learning/training. "Such knowledge, skills and values have been transmitted to succeeding generations through techniques and methods arising from the native people's own ingenuity and tradition" (Report of Proceedings 1981: 8).
2. Although wayang in this paper refers only to Wayang Kulit (leather puppets), the term 'wayang' embraces several traditional Javanese (Balinese and Sundanese) theatres, e.g. wayang purwa, wayang gedog, wayang madya, wayang klitik, wayang golek, wayang suluh.
3. Clara van Groenendael's study concentrates more on the role dalangs have played in the society of the "Principalities" of Central Java, their training, genealogy, the different styles between popular and court traditions, and the position of court dalangs. She also describes the training of dalangs in their new role as disseminator of messages for development. Keeler's study gives more emphasis on the relationship between dalang, sponsor, performance and audiences in the broader framework of Javanese social relations.
4. See also Arps (1985).
5. See Parsudi Suparlan: *The Javanese in Surinam* (1976), G.D. van Wengen: *De Javanen in de Surinaamse samenleving* (1972), and Yusuf Ismael: *"Indonesia", pada pantai Lautan Atlantic* (1955).
6. Among the younger generation there is a declining interest in wayang. This has been observed by both Suparlan (in Surinam) and Keeler (in Indonesia). Suparlan noted "there are several reasons given by the Surinam Javanese why they do not like to see the wayang performance. They say that the performance takes too much of their time, for it is always performed the whole night from early in the evening until dawn the following day. Some of the Javanese language used by the dalang is difficult to understand because these are Javanese Krama Inggil (highly refined Javanese) words" (1976: 150). Keeler observed the following: "In fact, there is a peculiar version of illiteracy in Indonesian today, concentrated among relatively highly educated young people. Unless they have taken a special interest in the performing arts, especially wayang,

young Javanese (also Balinese, and I assume Sundanese) are ignorant of the classical vocabulary which their fathers, even if illiterate, can often understand" (1982: 321).

7. Culture is defined here as "the configuration of learned behaviour and the results of behaviour, the component elements of which are shared and transmitted by the members of a peculiar society, in a continuous process of adaptation and alteration as a result of its changing environment and its members' creativity" (Dubbeldam 1984: 12).
8. See also the paper on Delsilife by Socrates in this volume [Chapter 4].
9. Indigenous Learning System (ILS) is defined by the Seminar as "the internally generated or self-designed cultural and educational response to pressures from the native cultural heritage or from diffusions or impositions from the outside as peoples find ways to meet their felt needs" (Report of Proceedings 1981: 1).

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10.

A National Identity in Process: the Indonesian Experience

Joannes Riberu

After independence the government of Indonesia faced the enormous task of moulding the archipelago, divers in religion, ethnical lineage, geographical environment and level of development, into one united nation. A common national base was developed by making a main trait of the cultural heritage of all ethnic groups in Indonesia the guiding principles for all political, economical and socio-cultural activities. This article discusses these principles, the so-called Pancasila, and the role education has played in the building of this national cultural identity.

The topics selected for this symposium, namely culture, education, and productive life, are highly relevant. In the framework of culture I would like to discuss a great effort, which has been launched by a new, developing country: Indonesia. That great effort is the building and the developing of a national identity. The development of a national identity is supported by all means included the national education system.

Indonesia in brief

Indonesia is a vast archipelago around the equator, stretching from 95‘ to 141‘ East longitude, and from 6‘ North latitude to 11‘ South latitude. The distance from West to East is 5,110 km (approximately the distance from London to Bagdad). The distance from the far North to the far South is 1,888 km, which is more or less the distance from Oslo to Rome.

According to the population census held in 1980, Indonesia's population was 147 million. With a growth rate of 2.1% per annum the population is now estimated 180 million (the fifth biggest country in the world).

The Indonesian Archipelago consists of 13,667 islands and is divided into several main groups, being the Greater Sunda Islands (Sumatra, Java, Kalimantan or Borneo and Sulawesi or Celebes), The Lesser Sunda Islands (Bali, Lombok, Sumbawa, Flores, Sumba and Timor), The Molluccas (Amboina, Saparua, Halmahere, Ternate, Tidore etc.) and West Irian.

For more than 300 years this archipelago was under Dutch colonial power and was named Dutch East India. After a three years' Japanese occupation (from 1942 to 1945) the Indonesian national leaders Sukarno and Hatta proclaimed the archipelago's independence.

During the first 20 years after the proclamation of independence Indonesia went through continuous political disturbances. After the coup in 1965 the situation has been restored step by step. In 1969 the nation began to build up the country through stages of Five Year Development Plans. Now, at the end of the fourth Five Year Development Plan, many results can be seen in every sector of national and local life. People's welfare increases steadily and Indonesia faces a future of great prospects.

A distinct political pattern

After World War II new countries emerged on the international stage. These new countries received or fought for their independence from the colonizers. Many of these new countries simply followed the political set-ups, institutions and economic and socio-cultural patterns inherited from the colonial powers. There were also countries which enforced what was wanted by super power countries expanding their political and economic ideology.

These superimposed life patterns obviously caused regrettable alienation and cultural gaps. They were not linked with local ways of thinking, patterns of behaviour, ways of life and value-systems of the local society. Ambiguity and distortions resulted. On the one hand people externally followed Western and other foreign life patterns, on the other hand they maintained and implemented traditional cultural values. Ambiguity and distortions sterilized the superimposed patterns and caused many social frictions and frustrations.

Therefore, from the onset of independence and the national movement, Indonesian leaders stressed the importance of building a nation based on Indonesian culture. They rejected the political and social life patterns of other nations, especially those of the colonial power. They were convinced that a nation should be supported by its own people and should be deeply rooted in its own cultural heritage.

A unifying way of life

The main point in nation building is the development of a national identity. For Indonesia the effort to develop a common national identity is a must, because the Indonesian society is a highly plural(istic) one. There are many races and tribes with different cultures and subcultures, different languages and dialects. More than 370 ethnic groups and 67 main languages are registered. There are five religious groups: Muslims, Protestants, Catholics, Hindus and Buddhists. There are differences in flora and fauna, in topography, in development and progress among the various regions. To keep this diversity and plurality together Indonesia needs a unifying way of life, a unifying philosophy of life, a unifying mental set or mentality. This unifying philosophy of life (*Weltanschauung*) should be the basic frame of reference, the basic common platform for all citizens.

After having deeply considered the different alternatives offered by international ideologies such as socialism, communism, fascism and liberal democracy, the Indonesian leaders agreed to determine their own way, the Indonesian way. This Indonesian way was accepted and officially restated in several decisions of consensus made by the highest State Body, which is the People's Consultative Assembly. Indonesia would follow neither the Western ideological and political pattern, nor the Eastern pattern. Indonesia accepted explicitly as its common platform a philosophy found in the different ethnic groups, cultures and subcultures in the archipelago. This common philosophy is the *Pancasila* or the Five Principles, five basic guidelines. Pancasila is stated as the Nation's Philosophy of Life in the Preamble of the Constitution of 1945.

The five principles

The five basic principles of the Pancasila are:

- First: a belief in the One and Only God. On the base of this first principle the Republic of Indonesia allows its citizens to believe in God according to their own conviction. Moreover, the Republic is responsible for the religious life of its citizens and therefore promotes this life, without interfering in the internal affairs of each religion. At the same time the Republic tries to make the different religious groups live in a spirit of tolerance, harmony and fellowship.
- The second principle is a just and civilized humanity. According to this principle the Indonesian citizens are obliged to recognize basic human aspirations such as: the dignity of a human being; equality and equity; justice and non-discrimination. This principle obliges every Indonesian to observe mutual tolerance, respect and understanding and even to 'realize mutual love' (Sic).
- The third principle is the unity of Indonesia. The Republic realizes that it consist of so many islands, so many races, tribes, so many religious groups. This principle obliges all citizens to strive for the unity of the

nation, with the motto: unity in diversity (*bhinneka tunggal ika*). This unity in diversity is to strengthen the national sense of belonging and even a national solidarity. According to this third principle, every citizen should cherish the nation's and state's welfare prior to the group's or individual benefit.

- The fourth principle refers to the traditional way of decision making in communal groups. In village life decisions are made in long group deliberations. In the deliberations everybody has to aim for consensus. This principle is as follows: Democracy guided by the prudent wisdom in deliberations among representatives. It emphasizes that the highest authority is in the people's sovereignty. The people's sovereignty is achieved through representation of members of the People's Consultative Assembly. The deliberations in the People's Consultative Assembly are not conducted in a spirit of political adversity, but in a spirit of communal brotherhood, togetherness, mutual understanding and co-operation.
- Finally, the fifth principle expresses a very human aspiration: to promote social justice for all Indonesian citizens. The state is founded not for the sake of the state or nation but for the benefit of all citizens. Therefore the Republic and the whole nation should strive to promote and distribute as equally as possible the welfare of all people in Indonesia.

Main characteristics of the Pancasila society

The Indonesian society and state based on Pancasila have some special characteristics distinguishing them from other societies and states. The characteristics can be found in the political, economic and socio-cultural life of the nation.

In political life

The Pancasila state regards itself not as a police state but as a provider state. A police state intervenes only when there are some troubles or clashes among citizens. A provider state tries to do all for the benefit and the well-being of its citizens. As a provider state Indonesia rejects etatism but involves itself in all major issues of social life.

As a state Indonesia has a parliament but it does not mould its statesmanship and politics according to the principles of a liberal Western style parliamentary democracy, or according to the principles of an Eastern style people's democracy. A liberal parliamentary democracy settles things according to the balance of political power in the legislative body.
Indonesia, with its Pancasila style, tries to cope with problems and issues

in a spirit of brotherhood, mutual respect and solidarity. In this spirit all political parties and interest groups are involved in harmonious co-operation for the benefit of the whole nation. All parties engage in negotiations in search of a consensus. For the purpose of a consensus voting is avoided and is only used when other means (dialogue, exchange of views, lobbying) fail.

In the spirit of mutual understanding and togetherness Indonesia is not happy with Montesquieu's 'Trias Politica', the complete separation between legislative, executive and judicial power. The constitution states that the highest executive, the President, shares the legislative power with the parliament.

Another characteristic: Indonesia is neither a theocratic nor a secular state. It is a state in between, a state 'sui generis'. According to the first principle, the belief in the one and only God, the state has to promote the religious life of the citizens. It does not take the law of a religion (e.g. the religion of the majority) as the State's law. But it pays attention to the needs of all religious groups in the country. The state supports facilities for religious life and worship. In the national annual budget there is a certain sum for the building of mosques, churches, and temples; for the printing of the Holy Scriptures of the different religions, etc. To arrange all this, Indonesia has a ministerial department for religious affairs, with directorates for Muslims, Protestants, Catholics, Hindus and Buddhists.

The state promotes tolerance, peaceful co-existence, mutual respect and co-operation between adherents of different religions. There is a Board for Deliberation among the leaders of the different religious groups. In this board conflict and potential conflicts, and matters of co-operation among the different religions are discussed in the same spirit referred to above.

In economic life

Indonesia develops what it calls a Pancasila Economy. The Pancasila Economy is based on the same traditional, communal spirit of solidarity and mutual co-operation. Section 33 of the Constitution states that "(National) Economy is arranged as common efforts based on the principle of brotherhood" and that "important production sectors, linked to the basic needs of the entire population should be under state control". The most proper way to build a national economy based on brotherhood is by way of co-operatives, for which Indonesia has created a department.

The Pancasila economy tries to avoid the 'free fight of liberalism, etatism, and the centralization of economic power in a different kind of monopoly (cf. Guidelines of State Policy 1988, III, B. 14b). It stresses the social dimension of all economic activities. The national economy should serve the needs of the whole population in the different life sectors.

In socio-cultural life

In social life traditional communalism is strongly developed, and adapted to the modern life situation. Co-operation between different ethnic, religious and cultural groups in society is promoted.

Thus there are institutions, foundations supported by representatives of different religions, different ethnic groups and different subcultures, which organize education, information and other services for the benefit of society. In Muslim 'civil' ceremonies, Christians take part, and in Christians 'civil' ceremonies the Muslims are involved. For instance, in the opening ceremonies of a national Koran reading contest, Christian schoolchildren offer attractions. It often happens in parliament that Christian members advocate a better management of the pilgrimage to Mecca, and that members express their interest in the progress of a Hindu Institution of higher learning.

The integration of all these ethnic groups and sub-cultures is now in full progress by means of transmigration and resettlement plans and programmes. All this is made easier by the high social mobility achieved by an improved nation-wide transportation system.

Communalism, which was common in village life, is now applied in the life of a whole district, province and even of the whole country. The sense of responsibility of all, based on a feeling of togetherness, is strongly stressed and developed.

Similarly, the press and other mass media in general are trying to carry out their responsibility according to the ideals of Pancasila. In labour relations, Indonesia is now aiming at a tripartite togetherness among the owners/entrepreneurs, the workers and the government. In the spirit of deliberation for consensus, all frictions and problems are discussed and solved.

In addition, Indonesia is looking for a Pancasila style of management and leadership. Seminars, discussions and workshops are arranged to go into the various new concepts based on Pancasila.

The popularization of Pancasila as a national identity

The popularization of Pancasila as a national State ideology is attempted in two ways:

1. through legislation;
2. through a nationwide formal and non-formal education process.

Legal decisions

The Preparation Committee of Independence (PPKI) agreed that the new Indonesian nation should have its own philosophy of life. And so, inspired by a speech by Sukarno, the five principles (the Pancasila) were adopted in the Preamble of the Constitution of 1945 (the last section).

This section reads as follows: "...to establish the Republic of Indonesia, a republic of people's sovereignty based on: belief in the one and only God, just and civilized humanity, the unity of Indonesia, democracy, led by the wisdom of deliberations among representatives, and social justice for the whole people of Indonesia".

The Constitution, with Pancasila in the Preamble, was promulgated on 18 August 1945, one day after the proclamation of independence. Pancasila is not regarded as a mere introduction to the Constitution. Far from it. Pancasila is regarded as the motive and inspiring power to the chapters and articles of the Constitution. So in the Indonesia legislative tradition Pancasila has become the main source of all other laws.

Pancasila was re-emphasized explicitly as the Indonesian way of life after the coup d'état in September-October 1965. Directly after this national tragedy the People's Consultative Assembly reached and issued a national consensus regarding the enforcement of Pancasila as the national Ideology and Way of Life, and urged the government and the State's apparatus to apply the five principles purely and consistently.

In 1978, as a result of the bad experiences of long ideological and political conflicts, the People's Consultative Assembly issued another document, which explained in detail what the Pancasila State expects from a Pancasila citizen. The official document is called *Eka Prasetia Pancakarsa*, meaning 'one will and five efforts'. This document appeals to every citizen to carry out each and every principle in daily life, as a good citizen. In other words, Indonesia enforces a code of conduct for all citizens.

After this important code of conduct, another law was issued in 1985, regarding all political and social organizations. All political and social organizations should have Pancasila as the only principle in social, national and political life. According to this law, all political and social organizations are obliged to stick to Pancasila in their attitudes and activities.

Finally, in March 1987 The People's Consultative Assembly promulgated the Broader Guidelines of State Policy. According to these Guidelines the national Five Year Development Plan should be the implementation of the five principles of Pancasila.

The applications of Pancasila in political and social life

It is interesting to know how the five principles have been implemented in the nation's social and political life. The implementation of the Pancasila as State Ideology and National Way of Life is not a cheering story.

In the early years after independence, Pancasila faced many obstacles. As a new nation, Indonesia was still in search of a way to survive. It had to deal with conflicts due to political an ideological struggles in the different parts of the world. Each ideology, each main stream and party tried to impose its own ideology on the nation. There were the extreme right-wings, consisting groups that wanted to make Indonesia a theocratic State. On the other hand there were the left-wings, wanted to change the republic into a socialist-communist country. This extreme left was divided into two main streams, the pro-Russia wing and the pro-China wing. There were also groups in the society that wanted to apply principles of a liberal parliamentary democracy in Indonesia. Lastly, there were the nationalist Pancasila groups, which insisted on Pancasila as the source of national identity, the national Way of Life.

The political conflicts continued for two decades and ended in a national tragedy in 1965. On the night of 30 September 1965 the Communist Party launched a *coup d'état* in order to establish a communist country in Indonesia, as the third biggest communist country after China and the USSR. This coup failed and the Pancasila groups came out the winners. They did their utmost to steer the nation back to Pancasila as consistently as possible.

The long political and ideological conflicts and the failure of the *coup d'état* have awakened the people from their dreams. They now realized that a national identity based on national culture is a must. Pancasila, Indonesia's traditional way of life, began to win the sympathy and support of practically all groups and sub-groups in the country. A new national consensus came about: to re-establish Pancasila as the way of life of the nation, to implement Pancasila as the only principle in national, social and political life, and to institutionalize the national Five Year Development Plan as a means of implementing Pancasila.

The important code of conduct was not only accepted by the people's Consultative Assembly. A nationwide movement was arranged to disseminate this document to all groups and all regions. For that purpose public meetings were organized, symposia, refresher courses and discussions. All groups in society were invited to join the movement and to take part in consolidating the nation on the Pancasila base: farmers, labour forces, fishermen, intellectuals, civil servants and even leaders of the five religious groups in the country. A special Board was installed, with the specific task of teaching the code of conduct.

Due to this nationwide movement, political and ideological conflicts dropped drastically. All groups began to respect the intrinsic values of Pancasila and to realize how important it is to have a national identity based on a distinct Philosophy of life.

In the latest general election (1987) all social and political organizations advocated the only national state ideology. The differences only referred to activities, programmes and in emphasis.

At this moment it can be said that Indonesia has succeeded in maintaining and developing its identity. It has managed to convince its people about the important meaning and the usefulness of that identity. Indonesia now faces the next big step, which is the enforcement of the national identity in all aspects and dimensions of national life.

Education as a main instrument

In nation building and, more explicitly, in developing a national identity in Indonesia, both formal and non-formal education played a very important role.

The national education system is based on Pancasila and has the duty to educate Indonesian citizens according to the Pancasila Way of Life. The Education Act, of 1950 to 1954, states clearly that 'Education and training are based on the principle written down in Pancasila' (section 4). And the Broader Guidelines of State Policy stress that national education aims at increasing the quality of life of the Indonesian citizen, who believes in God, who maintains the ideals of humanity, who is responsible for the common interest of the nation, etc. All points of the code of conduct are listed here.

In formal education

To educate Pancasila citizens and Pancasila society, primary, secondary and tertiary education contains the following compulsory fields of study: Pancasila Morality, National History, The History of the National Movement, Indonesian Culture and Indonesian Language. Besides this curriculum there are several kinds of activities organized by the schools to develop the Pancasila morality and Pancasila code of conduct. Among them are the celebrations of national and religious holidays such as Independence Day, National Movement Day, Youth's Day, Hero's Day etc.

At the beginning of every school year, the students of secondary schools and universities have to do a special course on the Document of the code of conduct.

In non-formal education

Pancasila morality and the Pancasila code of conduct are also popularized by means of courses, meetings, discussions and role playing, done in different activities of adult education. All the courses of adult education are under the umbrella of the Board referred to before.

Great is the contribution made by mass media: the press, the electronic media and the group media. The national governmental and non-governmental broadcasting systems transmit programmes with Pancasila messages. The mass media offer programmes, which emphasize the diversity of the nation but which insist on the need of a national identity as a common base.

Pop songs and hymns, operettas and theatre performances are composed with messages of unity and diversity based on Pancasila.

Social organizations, especially youth organizations try to open the minds of the people. Solidarity, dialogue, co-operation and other Pancasila patterns of life are prominent in all cultural activities.

A powerful national movement in this regard consists in the centres for Family Welfare (PKK). These centres are organized from the bottom up. On the bottom level are the women, mostly housewives. PKK has ten programmes. One of them is the implementing of Pancasila morality and code of conduct.

Conclusion

In its 43 years of existence, Indonesia has struggled to maintain and to implement a national Philosophy of Life which characterizes the national identity. That Philosophy of Life is the Pancasila, the five principles.

Pancasila is accepted as the source of all legislation; it has been elaborated into a Pancasila morality and a Pancasila code of conduct, which should be observed by all citizens whatever their race, tribes, or religions. Pancasila is accepted as a common platform, where diversity can be bound into unity.

Through legislation, through the implementation of these laws, through formal and non-formal (adult) education, through social organizations and movements and through the mass media, the Pancasila philosophy, the Pancasila morality and the Pancasila code of conduct are propagated over the whole population. The motto 'unity in diversity' is now recognized by practically all groups of the population as a unifying bridge between different factions with different aspirations.

In formal and non-formal education, Indonesia has incorporated a set of Pancasila humaniora, which aims at creating Pancasila citizens as members of a Pancasila society.

For Indonesia the problem of a national identity is more or less solved. But it now faces another - maybe more crucial - problem. That is the problem of a more relevant educational system, which combines in balanced proportion the high touch of Pancasila morality and the high tech of vocational and professional skills. With this high touch and high tech the Indonesian citizens will be able to cope with the problems of manpower, labour opportunities and productive life. With a relevant and an adapted educational system the Indonesians could be the owners as well as the managers, users, developers and producers of their own natural and non-natural resources.

11.
Non-formal Education and Rural Development in Nepal

R.C. Devkota

This article explains the role of the Seti Project in the far-eastern Region of Nepal. As an experimental and innovative project it has developed a series of non-formal educational programmes in the rural areas.
The focus of this article is on the Cheli Beti Programme, a special non-formal education programme for young girls, a group that had so far been neglected socially as well as educationally. The success of the programme has influenced the development planners and educationalists, showing them the relevance of the replication of this programme to similar problematic areas.

Nepal, though being one of the poorest countries of the world, has the highest mountain (Mt. Everest) and 2.7% of world water resources, and is an independent country. Besides this Nepal has been facing enormous problems like population growth, low productivity, malnutrition, diseases, poverty, illiteracy, ecological degradation, etc.

Nepal's economy is predominantly rural. It has more than 90% of the total population (17.9 million) living in the rural areas, depending on agriculture. Only 34.8% of the total population is literate, while the female literacy rate is just 18.0%. The population growth is increasing at the annual rate of 2.7%, causing a high demand of food, clothing, fuel and shelter. 18.8% of the rural households are landless (C.B.S. 1987).

Due to a lack of food, rural people are forced to cultivate steep land and dry forest to grow extra food, but intensive cultivation has reduced the productivity. This has created an acute shortage of fuel, fodder and drinking water in most parts of the country. Deforestation has led to environmental degradation which will lead to the desertification in the near future.

Because a large proportion of the people is illiterate and because of a lack of awareness of their socio-economic, educational, cultural and political conditions, people have been facing many problems in the rural areas since the political change in 1951. In the course of time various attempts were made to overcome those problems, to uplift the rural people, but those decades passed on as an experimental phase, never revealing the reasons behind the failure of those programmes, and still the vast majority of the people live in the rural areas, and rural development as the crutch of national development is a desirability. Day by day enormous problems are increasing due to a lack of education among the vast majority. So it is very important to explore how education can be an instrument in promoting rural development. Since the 1970s Nepal has recognized the urgency of rural development and attempts of integrated rural developments are being made from the central level to the grassroots level. In some cases we can find valuable lessons from the past experience by the pathological investigation in rural development activities implementation. On the whole, the success of those attempts were very negligible.

The trends and issues

In Nepal the importance of non-formal education as an effective strategy for rural development has been recognized more and more, and attempts are being made to integrate non-formal education into other development activities. Besides this, formal education has also been expanded. The Seventh Five Year Plan of Nepal has laid emphasis on linking non-formal education with such needs of the target population as agriculture, health, sanitation, family planning, afforestation, etc. There is a trend of linking non-formal education with the participants' basic needs and problems in Nepalese context.

There is a growing recognition of the importance of non-formal education. It is regarded as instrumental in carrying out development activities by releasing human potentialities and generating their participation.

On the basic ground of the existing realities non-governmental organizations came into action in launching various types of non-formal educational programmes in the early 1980s. The efforts of the NGOs are more effective than governmental non-formal educational activities. Though the Ministry of Education is fully responsible in expanding such activities, less attention is paid to non-formal education in resource allocation, material development, training, evaluation research and co-ordination with NGOs. Some non-formal educational programmes have proved effective in helping the rural people to become aware of their present situation, to develop critical capacities, take action against their problems and to improve their situation.

In this respect, a case study of a project in rural Nepal is discussed in the following section.

The role of the Seti Project

Since 1981 UNDP, UNESCO and UNICEF, in co-operation with the Ministry of Education and Culture since 1981 has implemented a project named 'Education for rural development in the Seti Zone' (known as the Seti Project), especially in the Doti, Bajhan and Bajura districts, which are some of the remotest, most disadvantaged areas of far-western Nepal. This project aims to answer the basic needs of the rural people: a range of innovative activities is to transform the rural educational system, which will serve as a powerful force behind rural development. To explore the project areas, the existing situations, socio-economic, educational, political and cultural aspects were studied in the primitive stage of the project, aiming to design and develop educational programmes in order to overcome these problems. The existing realities of the project areas which were studied by the project's professional staff, are classified as follows:

(a) Development problems

Despite the impressive efforts on the part of His Majesty's Government, there were few signs of any successful development activities outside the district headquarters, in the main lower or larger population settlement areas:

- no vegetables were grown by the people, even though they had the necessary knowledge and skills;
- improved seeds were tested in the urban areas and developed but not applied by villagers on their land;
- water supply systems were installed and after a short while dried up because of a lack of maintenance;
- soil erosion was common, due to deforestation;
- health centres and hospitals did not provide meaningful services due to a lack of trained staff;
- stomach illness was common due to houses being surrounded by human and animal excrement;
- cottage industries were dying out due to a lack of improved technology and the inability to compete with cheap imported substitutes;
- family planning programmes had a minimal effect on the birth rate.

(b) Social problems

The social status quo was/is very much surprising and painful for those who had a clear view of it. Some of the facts are drawn here:

- people used to believe, because of their cultural heritage, that they are backward due to their fate, the *karma* from their previous life;
- the Brahmins and Chetris, as the dominant castes, held the best land, did very little work, tried to dominate the educational system. Common fraudulent practices were the cause of the poor having large debts which they could not repay;
- really nutritional food for the poor was only available on the annual ceremonial festivals;
- the worst fate was that of women, because they were bought and sold for a nice price, and had to work more than twelve hours a day;
- too many 'culture of silence'-people were not even aware of their situation;
- vices such as card playing, smoking and drunkenness were common in many places.

(c) Educational problems

Apart from social and development aspects, there were acute problems concerning educational aspects:

- lower socio-cultural groups (women and lower castes), who were most in need of having their self-concept improved, were severely underrepresented. With very few exceptions there were almost no lower caste children enroled in most schools;
- the majority of the teachers had no training and were badly motivated;
- teachers were not concerned with development;
- the curriculum was not relevant to the environment of the students;
- lecturing was the teaching method. The students were not stimulated to think and to relate their ideas to their actions;
- the majority of the students did not have copy-books, pencils or slates;
- the physical facilities of the schools were worse than the villagers' houses: they were far from the village, there was no compound, latrine, plantation, furniture, educational material, etc.;
- the students' attendance rate was very low, and there was a high dropout rate. Generally those who enroled in grade one dropped out before they reached grade two.

Besides these problems there were also some good results within the project areas. There was a network of schools spreading across the rural areas, far more extensive than in any other development sector. There were school buildings (though not in good condition); teachers who received their salaries on time and children (very few) who attended school and received (only at the primary level) free textbooks. A district Education Office released teachers' salaries and distributed textbooks.

From the start the Seti Project never imposed educational programmes from above. Unlike others, it made a painstaking study of socio-economic, educational, cultural and political aspects, by the experienced professional staff spending most of their time living with the rural people, sharing and participating in their daily activities. Such a study was more valuable in identifying the major problems of the rural people; then a process of groping, choosing problems (on a priority basis) mainly on three aspects (as described above) took place.

On the basis of those findings the Seti Project started to develop its own programmes with the participation of rural people (farmers - women and men - , teachers, social workers and politicians) on an experimental basis, focusing on education as an instrument of rural development in only a limited area. Careful implementation of those programmes, rural people's participation and regular supervision, monitoring and evaluation, resulted in positive responses. Based upon the impact of those programmes, and the problems encountered during the experimental phase, some modifications were made to make a successful revised final package for programme implementation. The initial experimental programmes were implemented in Silgaun, Bagthata, Uchakot, Fulot and Dehimandu.

In this paper the focus is given to non-formal education for rural development in general and special emphasis is given to the Cheli Beti Programme. Among the non-formal educational programmes of the Seti Project, a brief discussion of adult education is given in the following section emphasizing as how the Project had developed programmes at the grass root level in eliminating rural problems. Then, the discussion of the issue is focused on a special form of non-formal education for school aged girls who have not got schooling opportunities.

The adult education programme is one of the non-formal educational programmes of the Seti Project, and counts as one of its successful activities. It is unlike any other adult education programme in Nepal, for many reasons, the most significant of which are the practical activities (community actions) that form an integrated part of the programme. During the courses, which go on for four or five months, the participants have to carry out 18 development activities, besides lessons in reading, writing and arithmetic. Some of the practical activities are: building latrines, cleaning the village road and making improved cooking stoves. The teacher is paid twelve Rs. for each lesson he actually teaches according to the 'methodology of teaching' certified by the resource centre. If these practical activities are not carried out, he will not be paid, even though he did teach the cognitive lessons. These action-oriented adult education programmes are designed and developed in such a way as to help improve the living conditions of rural people by teaching them to mobilize themselves (Devkota 1982). Adult education teachers are normally trained at resource centres for 35 days in development aspects, methodology of teaching adults, and how to perform practical activities in their respective villages (Devkota 1982).

The Cheli Beti programme

The Cheli Beti programme is one of the special non-formal educational programmes for out-of-school girls (aged 6-14 years) of Doti, Bajhang and Bajura, developed by the Seti project through a continuous experimental action research. It is one of the most challenging non-formal educational programmes, because it has to serve a vast majority of rural Cheli Betis to provide them with nice opportunities to take part in their overall development.

Though there were 111, 105 and 74 primary schools in Doti, Bajhan and Bajura, respectively, only 653, 700 and 113 girls were enroled on the whole. Thus the female literacy rate in Doti, Bajhang and Bajura was 5.9%, 4.7% and 4.7% respectively. When rural parents preferred their daughters to do their domestic work such as cooking, pounding, fetching water, collecting fire wood and fodder, and to be involved in agricultural activities such as working in the field, digging, irrigating, harvesting and storing, the enthusiasm of the girls to be educated made way for other dreams, hoping to be married off at an early age. Thus rural Cheli Betis were forced to be bound to their cultural heritage and believe in their fate.

It was realized that through a powerful educational process, as developed by the Brazilian educator Paulo Freire and designed to break the 'culture of silence' and the fatalistic acceptance of people's roles, it is possible to ensure an openness to modern productive ideas of all groups in the development process (Bennett 1983). Only through education the foundation can be laid for a really self-reliant development.

The major characteristics of the Cheli Beti programme are summarised in the following paragraphs.

The professional staff of the project visited several villages in the project areas, and studied the existing realities (socio-economic, political, cultural and educational) of the target group. Drawing conclusions from the findings, the Cheli Beti programme is designed and developed, based on the story of Kamali (a local lower caste girl) whose major themes are applied to all the activities of other rural girls. The story: From her own mother Kamali expands her thematic wings, as her activities expand in a gradual process of development, to her neighbour, the community, the district and the Kingdom. This real-life story is considered exemplary for the girls in the Cheli Beti programme.

The curriculum is developed in a key word (or slogan) approach on a chain basis, grouping the areas of similar activities. The programme continues for 135 days. The key word approach is based on learning new words (slogans) made up of the same phonemes (word parts) as in the previously learned word, plus one new phoneme every time. The first page consists of a picture (taken from the environment of the rural Cheli Betis) and a key word or slogan is placed under it for its decodification. The next pages contain a reading text relating to the picture and key word (slogan). Roughly every fifth lesson is arithmetic and every seventh is a practical activity. Besides this, games and songs are also an integrated part of the programme. The aims in using pictures are to generate many ideas in the girls and to sharpen their mind to become aware of their existing realities, to look at their realities critically, to think critically and perform actions in order to improve their situation (Devkota 1985).

How does the Cheli Beti programme operate?

The normal process in the operation of the Cheli Beti programme consists of the following elements:

(a) Teachers' selection

The project announces the need for Cheli Beti teachers in advance within its project areas via resource centres, via satellite schools or village reading centres, together with full instruction about how and where to apply. Interested young women or school girls apply to their respective resource centres. On a fixed day they come back to the resource centre for an interview. The staff of the female education sector together with the representative of the resource centre take tests and interview them. The selection of Cheli Beti teachers is normally done in consultation with the teachers of the respective resource centres. Mostly school girls of lower secondary grade or neo-literate women like to take part in the training.

(b) Teachers' training

There is a 35 days' training course for Cheli Beti teachers, who have to come to a particular resource centre from different places, not exceeding 25-30 participants in one training centre. The training is fully residential, using a participatory approach, learning from experience, sharing and contributing to each other in the group. The philosophy of the training is: 'a good teacher is the same person who becomes a good learner; a learner is the same person who becomes a good teacher'. Lecturing is out of the question. Discussions and demonstrations are the backbones of the programme (Devkota 1988). The training focuses on the introduction of project activities, methodology of teaching (especially designed for this programme), orientation to development aspects (like sanitation, nutrition, population education, first aid, agriculture, income generation, etc.), literacy and numeracy, motivational activities (songs/games), the role of Cheli Beti teachers, administrative procedures and teaching practice.

This training runs seven days a week. Each day there are two sessions. Each session is generally divided into two parts. During the first part the trainer (female project staff) introduces the topic, arranges a guided discussion, and demonstrates things. During the second part most of the activities are carried out by the trainees. Activities such as individual assignment, group work, practical activities and micro-teaching are covered.

Though the participants as well as the trainers from the project staff are from various backgrounds, socio-cultures, castes, there is no discrimination among them. The trainer shows the model to the participants, and the habit of doing things together, creating something together, sharing, co-operating, co-ordinating, builds a sense of self-reliance, confidence, commitment and leadership.

(c) Screening the Cheli Beti

When the training is completed all the Cheli Beti teachers return to their respective villages. They take the initiative to form a Cheli Beti class management committee of rural women and men who like to help in those activities. Screening the Cheli Betis for the classes is a difficult task because of the huge groups. A verbal screening takes place either at the village reading centre or at a school nearby or at a house in the centre of the village. The teachers give priority to those who are socially depressed, from a lower caste, illiterate, and the seniors among them, making an average of the model-sized class of 20 Cheli Betis. This will encourage others to participate in the next programme.

Then the teachers gather the Cheli Betis and the class management committee to discuss items like: how to find a suitable place for the conduct of the classes; how to arrange the setting; how to bring the necessary materials from the resource centre to the classroom; how to perform practical activities in their communities, etc.

(d) Operation of Cheli Beti classes

As stated above, all teachers screen the Cheli Betis, give full information on the exact day of the class operations, deliver the materials from the resource centre, and arrange a place for the classes which is convenient to all in the centre of the village. The class operates in the morning from 7.30-9.30 a.m.

On the first day the members of the management committee, other men and women come in to see how the lights go on in the 'Tuki'. The Cheli Beti teacher arrives with all the necessary materials, and the Cheli Betis come on time. After arranging the seats, placing the blackboard in a proper place, the Cheli Beti teacher gives an introduction of the programme and the procedures, appeals to the parents to help their children to come on time, to perform the community actions and to try to learn something from their Cheli Betis. Then, turning to the girls, she encourages them to come to the class regularly, to try to act according to what they learn, to be friendly to their friends, to take good care of the materials provided to them.

Then the teacher distributes the materials provided by the project, the folder for lesson sheets, the slate, slate pencil, a copy-book and a pencil. The teacher distributes the first lesson sheet and asks the girls what they see on the first page. For 15-25 minutes she leads the discussion on the picture or photo of their own environment and a key word or slogan. The Cheli Beti express their ideas and each of them is encouraged to say something about the picture, to react on their existing realities. Then they practice the decodification of the picture/photo, recognizing the key words, word parts, and word part sequence.

For 30-40 minutes the exercise in visual perception goes on, verbalization is stressed through comparing different sizes, letters, etc. To increase their learning enthusiasm literacy and numeracy games are introduced with full instructions. All the girls take part in the game for ten to fifteen minutes. They are encouraged to make new words from the word parts they learnt before. After this follows a verbal exercise. Having gained visual perception, recognition and verbalization, they are asked to read the story based on the picture or photo. The Cheli Beti teacher helps when difficulties arise. The Cheli Beti can read the passage easily, because they have been introduced to the limited words used. After this reading exercise an educational song is introduced with a mode demonstration by the teacher. Then the Cheli Betis are given some minutes to practice.

After that the last step follows: writing. Word stocks are normally introduced, followed by exercises on the new word part. Making words and sentences is encouraged. Thus at the end of the first lesson a Cheli Beti can be proud of having learnt a great deal. She will be able to read the sentences introduced in the story, write sentences about it, play games and sing a song very nicely.

On the second day the teacher checks the personal hygiene of each Cheli Beti, to see whether they have applied their skill and knowledge. She corrects homework, after which she follows the methodological steps of teaching. Home visits with the Cheli Beti is also emphasized to encourage them in performing practical activities.

Learning to read and write is not the only purpose of this programme, but it is an instrumental process for the purpose of community actions in the rural areas. Thus development activities are an integral part of the Cheli Beti programme. How to clean the face is introduced in the second day of the programme, and on the third day making a school bag (with the materials provided by the project) for the safe keeping of the materials. Roughly every fifth lesson is an arithmetic and revision lesson and every seventh lesson consists in practical activities based on what has previously been taught, like cleaning the house, making a kitchen garden, planting trees, cleaning the local *dharas*, making latrines, making *Aushroli Pani*, making *Sarb Atampitho*, etc.

All together there are 18 practical activities in the 135 days' programme. The project provides development inputs, such as seeds of green vegetables, fruit tree saplings and deworming medicine. In carrying out such practical activities the teacher gives model demonstrations, after which the Cheli Beti are asked to follow her example. The teacher helps the Cheli Betis upon request. The girls also ask help from their parents in some cases.

Participation of the parents in these development activities is highly appreciated, because then they can see that their children have their own work to do during the day and evening, and they will not shift their work on to them.

When the Cheli Beti teacher encounters difficulties during the operation of the programme, she asks the help of the teachers of the resource centre, who are supposed to supervise her programme, and of one of the project staff when he or she is present for supervision. Because of the continual supervision the teacher has many chances to ask help on how to improve her activities in the village.

Already there have been 105 classes and 2100 Cheli Betis have graduated.

Institutional support for the programme

The roles of institutions in supporting the operation of the Cheli Beti programme.

Role of the Seti Project

The project plays a vital role in this programme. In connection with the Cheli Beti Programme the project hires qualified staff (consultants) for specific tasks aiming at the improvement and strengthening of the programmes. This staff prepares materials, revises the programme and makes it ready for printing in the capital Kathmandu, checks the print-proofs and the quality of printing, arranges packages of 21 sets of the lessons to be delivered to the respective Resource Centres. The staff prepares various forms and necessary materials needed for the training of Cheli Beti teachers.

The selection of teachers is normally done by the project staff in consultation with the teachers of the Resource Centre. Orientation is done by the technical advisor and the consultant.

It is also the task of the project to provide the various reading materials and development inputs to the Village Reading Centre and to train its members. It links the District Education Office with the Resource Centre, the Village Reading Centres and the Project Office.

Training the teachers of Resource Centres for the improvement of teaching/ learning situations is another one of the project's roles in close co-operation with the district education office, providing teaching/learning materials and development inputs. The project also helps the rural people, through the District Education Office, to improve the facilities of the school, such as building a school, a compound wall, a playground, a drinking water supply, making plantations latrines and organizing skill training for the villagers.

The project makes payment to the Cheli Beti teachers available in time and keeps data information about the programme.

Another task of the project staff is the preparation of training manuals for teachers, guide books on the programme, like: How to teach Cheli Betis? How to perform practical activities? How to write supplementary readers for neo-literates? Such guide books help the staff on various levels, the teachers and the social workers in the development process of rural communities.

The continuous supervision and evaluation of The Cheli Beti Programme is a prerequisite for meeting the needs of the rural people.

The Resource Centres

The Resource Centres are the 'legs' of the project, improving the effectiveness and relevance of basic education in rural Nepal for adults, Cheli Betis and others. From the start the project has put a great deal of emphasis on developing an effective system for supervision on the implementation of project activities through the creation of Resource Centres. These Centres help to announce the Cheli Beti teacher training, select the teachers, guide them with where and how to run the classes, arrange the 35-days' training of teachers and their accommodation and meals.

For the Cheli Beti teachers the Resource Centre organizes trips to their communities. They are guided by the trainers, which provides a favourable environment for various community development activities during the training period. Building the school in the community is also another task.

The Resource Centre collects the materials for the Cheli Beti classes, the adult class, the Village Reading Centre and satellite schools from the nearest road or airport and quickly delivers them to the respective places. Moving from the centre to the periphery plays an important role in the success of any programme carried out by the project. Building such a two-way communication system for the implementation and supervision of the programme ensures a qualitative programme.

The Village Reading Centre

Village Reading Centres are the local institutions initiated by the neo-literate people of the rural areas. The members of the Village Reading Centre are the parents of those who attend the Cheli Beti classes. The Centre is not only open in the evening for reading purposes, but it also carries on various development activities by mobilizing the rural people to change their socio-economic, cultural, political and educational status. These Centres help the Cheli Betis to perform practical development activities, give inputs or supply materials from the Resource Centre or Project Office, playing a mediator role in the implementation process of all sorts of development actions.

Cheli Beti teachers organize cultural programmes in their Village Reading Centre appealing to rural women and men and their cultural practices. Every Friday the Cheli Betis gather in the Centres and sing educational songs together, then make a round trip to their villages. The Village Reading Centre has very much the function of a village development centre.

The line agency

The line agency of the Seti Project is the Regional Directorate of Education, far-western Region, through which each District Education Office is responsible for all the programmes in their districts: implementation, monitoring and evaluation of each project's activities. Co-ordination and co-operation of these authorities is necessary for the project programmes. Each District Education Office makes available its technical field staff during the training for programme supervision and helps to keep updated the progress of project activities besides its regular activities. Because the entire schools' and teachers' network is under the control of the District Education Office, they are loyal to their respective offices. The Seti project has done its best to obtain the involvement of the District Education Authorities in all respects. For instance, letters to those selected for training are channelled duly signed by the District Education Authorities to avoid practical problems and to make them feel that new steps forward are based on what they had already achieved. Maximum involvement of the authorities is desired in handling all the innovative activities under their auspices, within given resources, when the project is terminated. Furthermore, the authorities try to make available development inputs or technical assistance from other development sectors such as Agriculture, Forestry, Small Scale Industry, etc.

The impact of the Cheli Beti programme in the rural areas

The role of the Programme in the rural areas can be visualized by the impact it has made. In the course of time the Cheli Betis have engaged in a number of development activities, sharing their ideas and participating together for their improvement. Any changes in the life-style of the Cheli Betis in their daily behaviour, compared to the past, have an encouraging effect on their community.

The gradual process of change due to the role of the Programme is summarized below.

(a) The Cheli Betis, understanding the importance of personal hygiene, later influenced the members of the family with regard to their attitudes. Members of the family were forced to reflect on their existing situation. The parents started to clean their kitchen, cooking equipment, the house, courtyard, etc.

(b) The establishment of Village Reading Centres is also one of the credits of peoples' participation. Steps are taken to work together for the improvement of cultivation and harvesting. Village Reading Centres mobilize rural people in these activities.

Planting trees in a common plot and in the school compound became popular, as well as planting trees on private land. More than two thousand fruit trees were planted by the Cheli Betis who had participated. Three thousand women participating in the adult education programme had planted fruit trees.

(c) As mentioned earlier, there were no practices of growing green vegetables. When the Cheli Betis participated they were given seeds and started growing green vegetables, eating them and selling the surplus. Then the parents became proud to know the nutritious and economic value of green vegetables. The rural people started to look critically at their practice of agriculture and changed their pattern in order to get more production. Improved seeds were introduced. More than 2000 Cheli Betis and 105 teachers have introduced growing various green vegetables in their communities and started to plant various fruit trees.

(d) Furthermore the Cheli Betis pressed their parents to raise the income by goat keeping, poultry raising and knitting. This came off the ground to some extent, and only in a gradual process.

(e) Most of the Cheli Betis have to look after the cattle during the day. The newly learned knowledge and skills helped them take better care of the livestock with regard to feeding, treatment of diseases, etc. They started to use manure in farming and making compost manure is becoming popular, which increases the crop production.

(f) The percentage of girls' enrolment in primary school has increased. Cheli Betis like to go to school after completion of the Programme. Adult women are also interested in joining female adult education programmes and some have benefited from them. Even illiterate adult men have shown keen interest in joining the adult education programme. Thus, created a high demand for non-formal educational programmes for rural development. Inter-school competition of a high number of girls has also awakened the parents, social workers, teachers and political leaders. More than two thousand Cheli Betis are graduated, some of them enroled in the primary school in grade 2/3. Thus the enrolment in primary schools has raised to 18,163, 6,803 and 10,939 girls in Doti, Bajura and Bajhang respectively.

(g) The Cheli Beti Programme has played a important role in the liberation of women from their 'culture of silence'. For that purpose educational songs are an integral part of the Cheli Beti Programme. There is a tradition of singing when going into the forest to collect fuel wood or fodder and during occasional festivals. *Dauda* singing is common in the Seti zone; it was supplemented with educational songs by the rural Cheli Betis.

Such songs have become very popular throughout the project areas, even where girls and women have not attended the Programme. With the help of Cheli Beti teachers, the girls, the members of the Village Reading Committee and school teachers show cultural programmes based on educating rural girls and women, the liberation of women and women's equality and rights. The Programme has sharpened the thinking of the rural women and created a critical awareness of their social conditions.

The interest of rural women to be educated has grown, they take part in social activities and improve their standard of living by utilizing the knowledge and skills gained in the programme. In this way women have started to participate in the development activities and in village politics. More than 2 thousand Cheli Betis graduated, 105 teachers have already been trained, and around 3,000 adult women are literate through the adult education programme.

(h) A total of 3,545 participants have been trained by the project in association with various non-formal educational training (Crowely, 1988).

Conclusion

The Cheli Beti Programme is a highly challenging programme and has contributed much in the rural areas of the Seti Zone, Nepal. At present rural Cheli Betis and women have the opportunity to improve themselves in all respects, thus the gradual process of development is shared equally without any discrimination. On the basis of the impact of the Programme the following conclusions are made.

The Programme is effective for rural life, especially for rural women/girls, who learn to identify themselves with their problems, think critically and find solutions. Repeated action has created new practices in socio-economic, educational, political and cultural aspects, which contributed to their development.

There still is a growing interest, and a high demand of the Programme within those areas, which has drawn the attention of development workers. Even by the end of the second phase of the project it is difficult to meet the demand of the rural people in this respect.

Though this programme can be greatly effective for rural development and in spite of the positive results, there are considerable problems to be tackled.

The project has failed to identify a suitable woman to guide this programme, so the frequent outside consultants must depend upon their own resources. The existing junior staff do not have the capabilities to adopt additional tasks. The Ministry of Education and Culture has included this programme into the Basic Needs Programme of the government; even this Ministry has not the experienced staff in the related field and tries to institutionalize it as the hand-over phase of the Seti Project will be terminated in 1990. Therefore in-depth research studies must be carried out in the following areas, to develop a strategy for rural development in planning, implementation and evaluation aspects in respect to how such a non-formal educational programme has positively contributed in reducing rural poverty in rural Nepal.

- Can this programme be replicated to other areas where we can find similar problems?
- Can we use the same approach and methodology to facilitate the out-of-school children?
- Can the Cheli Beti Programme be developed as one of the income generating activities for rural women?
- Can the Programme be a rural poverty alleviation programme in Nepal and elsewhere?
- Can the Programme be a dynamic one for women's liberation?
- What are the perceptions of rural people about the Cheli Beti Programme as an instrument to improve their lives?
- Can non-formal education be a radical strategy for rural development in Nepal?
- How to co-ordinate the NFE/Cheli Beti Programme into Governmental and NGO-programmes?

I do believe that this is an effective, innovative, non-formal educational programme by which we can contribute a lot to the rural people. Improvement and strengthening of the programme depends on how it is safeguarded.

I would like to draw the reader's attention to whether the same approach or methodology can be applied to other countries or not. It has developed a sense of self-reliance, confidence, commitment to the development of rural areas by mobilizing the rural women/girls. It can help us to maintain our ecology, improve production, raise income, improve health and sanitation, reduce malnutrition, promote birth-control, educate rural women and girls, and encourage participation in liberating movements. Thus a crossroad to national development in a sustainable development process has been built up from grass root level.

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12.

Recent Discussions on Popular Education in Latin America

Anke van Dam
Gerhard Peter

Popular education programmes take as a starting point the knowledge and experience of the participants in the groups. The methodology of popular education focuses on collective participation. The relation between educator and participants in the education process is characterized by equality, in contrast to the formal hierarchical educational systems. The authors take stock of the results obtained with popular education approaches over the last few decades in Latin America. They point at a number of critical issues at theoretical as well as practical level that seem to hamper the effectiveness of some of the programmes, and make suggestions for research issues that may help to overcome the identified bottlenecks.

The origins of popular education can be found in adult education, the latter showing many and far reaching developments during the last decades. Initially adult education was mainly directed at marginal groups[1], that could hardly, or not at all, make use of the formal education systems. Literacy programmes played an important role within this type of education, and were mainly based on the assumption that underdevelopment, in the social as well as in the economic area, could be overcome by providing education. The back-log in education was conceived as a barrier for the development of a country, and efforts were made to improve this situation. National campaigns were organized, offering the adults a second chance to complete their basic education.

Gradually the specific methodologies which, different from education for children, were needed for adults, got more attention. Illiteracy was being seen as an aspect of underdevelopment, preventing these groups to participate in the economic, social and political activities in society. This theory aimed at integrating the marginal groups into national development.

Conceptual principles changed and in the seventies the central focus was on permanent education. Each person should get the opportunity to learn during a lifetime. During that learning process one tried to improve the conditions of life. Efforts were directed at initiating a process of consciousness, during which the concerning group gained insight into the causes of hunger, illness and poverty, at the same time looking for possibilities to overcome them. During this learning process the participant was no longer seen as an object, but as a subject trying to achieve his own goals and participating actively in the decision making process. This can be seen as a starting point in the development of popular education.

Paulo Freire ideas have been of great influence in the formulation of theory in the field of popular education. His critics were specially directed at the conservative role played by the existing educational systems, in which those receiving education, in his opinion, were taught to adapt to the existing norms and attitudes. In that way the system reproduced itself.

Freire takes as a starting point the interrelationship between education and society. Working in the field in which the basic principle of education is no longer a 'deposit' of knowledge (the so-called banking system), but the real life situation of the participants.

In that way a link is being developed between the contents of what is being taught and the concrete (social, economic and political) situation in society. A direct effect of this process of consciousness is the need for organization experienced by these disadvantaged groups, to start development and a process of social change during which the group interests prevail.

Popular education in Latin America is a movement that adopted many of the ideas of Freire. It gears its attention to those groups in the society often living at subsistence level, and presents itself as an alternative to the formal education systems. Stressing the autonomy of the groups and their possibility to improve the existing social and economic conditions, it clearly includes a political dimension.

Popular education is a diffuse entity in the sense that it includes a large variety of processes and activities. Although an unequivocal theoretical framework is lacking, and it is hardly possible to provide a clear definition, a number of similarities can be indicated as far as the implementation of popular education programmes is concerned.

Popular education programmes take as a starting point the knowledge and experience of the participants in the groups (Bengoa 1987).

- The methodology of popular education focuses on collective participation; it is in itself a democratic and participative process. Starting from the practical experiences of the group members, a theory is being developed, that in its turn will lead to a new and better practice. This methodology of practice-theory-practice, or action-reflection-action is conceived as a systematic process.

- The relation between educator and group participants in the educational process is characterized by equality, in contrast to the traditional, hierarchical educational systems.

Recent discussions and developments in popular education

The premises of popular education as mentioned above have not been elaborated in a more practical way. In practice it appears difficult to manage these principles.

Present discussions therefore take place at two levels. At the theoretical level there is a critical concern to elaborate on a number of ideas and principles, such as the underlying idea of social change, which is implicit in various practices of popular education. At the practical level critical comments of educators and researchers are increasing: premises seem hardly realizable in practice or produce unwanted results. Hence the gap between theory and practice seems to widen.

In the context of the developing and changing theory of popular education and social change, attention will be paid in this chapter, to social movements and their relation to the state, political parties, the church, trade unions etc. as a starting point to deal with the practical processes of popular education, which in their turn are closely linked to social movements and processes of social change. The main problems and questions presently under discussion will be dealt with, thus enabling a number of suggestions for the future.

Social changes and social movements

One of the issues recently under discussion in popular education, is the concept of social change. In many implementations of popular education projects emphasis has been laid implicitly or explicitly on concrete actions, striving for improvements or solutions of problems at a short term. The attainment of direct results was considered to be most important, but recently opinions are changing. Popular education should rather be seen within the context of a long-term process of change. Starting from the point of view of profound and time consuming processes of change, traditional organizations aiming at social change - such as political parties, churches, etc. - are being criticized. Criticism is levelled at the fact that these organizations are only concerned with parts of social reality; only economic or political aspects, or social structures. At the same time there is concern about popular education projects taking as a starting point for their functioning the same fragmentary and forced reasoning, directed at the attainment of direct results. It is now suggested that the notion of change in popular education is rather comparable to the one within the so called (new) social movements, in which it concerns processes of change within social relations. The very task of social movement is the creation of a different kind of social practice, connecting these dimensions (Evers 1986). Also from this point of view a new vision on social change should be developed. Conceived in that way, social change is no longer mobilization of the masses and their take-over of power by a vanguard, nor is it restricted to short-term requirements in the field of material improvements, but rather the creation of social forces and social cohesion in order to developed an attitude of criticism with regard to the dominant power structures. The execution of power can be found at the level of personal relations (men-women), in relations within organizations (leaders-group members), or institutionalized at a national level (government-population) etc. The emphasis is on including these very fundaments of power exercition in social change, starting from the practical situation. This process of social change is a long-term option and the strategy which has to be developed for its realization should be different from concrete activism and the objective of short-term results that have been pursued so far (Torres 1988; Gianotten & de Wit 1988).

The critics levelled at the society are based on the knowledge and culture of the movement or group itself. The educational process should be directed at the creation of autonomy for the disadvantaged group and their actors. Moreover a process should take place that removes the ideological aspects of politics, at the same time making politics part of daily practice.

Not only the production of knowledge but also the attainment of political results is important in popular education. These results were usually expressed in terms of an increase of power of the group. Under the influence of critics popular education is getting more and more political and tries to strengthen people in their daily life. It concerns processes of organization building and the acquirement of autonomy, directed at social and cultural change in society, in the interest of the disadvantaged groups in society. In that way the existing social structures and relations are criticized and attempts are made to create room for and with those groups, for their own social and political actions within the national political system. This is not to say that popular education intends to prepare and seize power, although the interest in political aspects of society is clearly present. In its relations with state and political parties, popular education does not directly identify itself with the struggle of political parties, which for instance are directed to the organization and mobilization of large numbers of the population. Although the importance of political parties is recognized, popular education in the first place is aiming at cultural and social change, and not to the creation of a revolution. The educational process by creating new relations becomes a social change in itself. The relation society-politics, parents-children, man-women, husband-spouse etc. are being argued.

For many educators the relation between the educational process and their idea of social change is not always a clear one. Their concept of social change (directly related to the short term concept of change) includes many moral and utopian elements, which do not contribute in any way to the development of a strategy of change. This concept should therefore be clarified and get its significance in relation to the concept of democratization . Democratization is more than just a right to vote, but it is also more than the creation of equality of opportunities in a society. It concerns strengthening of cultural identity and of the actions of the participants as social actors (Bengoa 1987). So it is not about mere integration in existing political structures or in the state, but about the very guarantee of autonomy, by creating a space for its own political actions. Autonomy should not be conceived as a process of isolation because this could lead to the loss of facilities, information and knowledge. Autonomy thus stands for having or getting the possibility to take decisions. In that sense forming an alliance and the creation of social movements can even lead to strengthening of the autonomy (Martinic 1988).

Women and popular education in Latin America

Clearness about the organization form of groups or movements is also badly needed. Starting with the issue of women in Latin America societies, it is tried to give more content to this item. The organization of women comprises a number of elements which are valid for all groups. Moreover the issues of women includes a number of aspects which are directly related to their gender specific characteristics and which are worthwhile analyzing.

Popular education programmes, although in different ways, are directed at the organization of the groups and at strengthening their social identity. These groups often live in bad social or economic conditions. It concerns urban city dwellers living in a marginal position as they hardly have access to all kinds of facilities and decision making processes. It could also concern small or landless farmers who can hardly survive. The position of women is specific in these cases, as women bearing the responsibility for the family, housing, nutrition etc. are the first to be confronted with the problems. It is therefore worthwhile analyzing in which organizational processes women are involved and which are their objectives and interests.

During a social, economic or political crisis, often women are the first to organize and protest against bad housing conditions, violation of human rights, low quality education for children. From their daily experiences they are the first to be confronted with these crises. It is also the women to organize in economic entities to develop survival strategies. Most of them unify around topics which are clearly related to their role as housewife and mother, and less with their eventual role of labourer or farmer. Organization means leaving their isolated position and searching for possibilities to strengthen their identity. This in its turn offers prospects to initiate processes of change. Taking their own situation as a starting point, women are able to develop mechanisms of resistance. This could be conceived as a potential force which is being achieved within the specific context of their social life, and obtains its value from it (Rebolledo 1988).

More and more women become members or specific groups as cooperations, trade unions, religious groups, workshops, health groups, etc., when searching for defensive strategies to tackle the social, economic and political crisis. Their participation and access to all kinds of administrative tasks is directly related to their gender specific role. In mixed organizations e.g. trade unions, political parties, neighbourhood groups, women mostly perform those tasks which are a continuation of domestic tasks, having little power at the decision level. Working in those organizations imposes a restricted frame of reference to women. Specific women's groups in popular education programmes therefore start with paying extra attention to consciousness of their gender specific situation, and of their social, cultural and political repression. However, for many women the aim of joining an organization is to solve concrete and immediate problems. In addition there is a need for more knowledge and information.

The type of gender specific organization and its realization is being discussed. Should women's organizations be structured differently when compared to those of men? The only model being available has been developed by men. But besides their job men hardly have any responsibilities, so their are in a position to dedicate almost all their spare time to various organizations. Women have less possibilities as they should take care of children, prepare food etc. In this situation it is important to forge tight links with other women from their community, to be in a position to confront the problems they meet. Task division is possible in that case and together it will be easier to make one's presence felt.

The activities of such women's groups - which are often in line with the role of mothers and housewives - are hardly appreciated by the outer world, and are not placed in a political dimension, as is the case with activities of other social movements.

The work carried out by women is neither appreciated socially. This applies to the tasks they carry out at home, as well as to paid or subsistence oriented outdoor jobs. This is closely connected to the way in which women are oriented to social aspects. They are not expected to participate actively in organizations, such as political parties and trade unions. Activities carried out by women are often of a defensive kind or are overshadowed by the actions of men.

It is therefore important for women to start specific groups in which they can create their own room, and can develop a methodology of their own, focusing on the importance and significance of the organization of women. It is interesting that, especially when taking the traditional role of women in society as a starting point, this involves a process of change. Having the possibilities of developing organizations on the basis of their traditional roles and tasks, causes that women leave their isolated positions and become aware of these specific roles and positions.

The line of approach of strengthening the identity and of social change, is essential for the educational process with women, but the same applies to educational processes in which other marginal groups are involved.

It is now possible to pay attention to the way in which the educational practice should be modelled, and to the problems one can expect to meet. These aspects will be dealt with in the next paragraph.

The educational process

It has already been indicated that during recent years the gap between theoretical concepts and daily practice of educational programmes has widened. Theory seemed to rely too much on a number of dogmatic principles which could hardly be realized in practice, thus loosing their supporting role.

It is possible that in this way popular education is becoming too pragmatic and is being applied on an ad hoc basis. The systematic development and growth of theory - in interaction with practice - is being blocked when rejecting in anticipation each form of theorizing (Gianotten & de Wit 1988). As a consequence, in many situations critical reflection with regard to the action someone is taking, will be lacking and a form of forced activism will be developed. Methodology and its supposed direct effects will then receive too much attention, overlooking the contents. A kind of 'participation' for the sake of participation' will be developed, without transferring any knowledge. In case popular education really focuses on education - although in a particular way - it should be considered that groups participating in the programmes have real expectations, which should be met during the educational process.

(a) The relation educator - participants
Another topic that is being criticized concerns the false principle of equality. In the traditional concept educator and participants play an equal role and have the same position in the educational process. The educator is therefore as much a participant as the other group members. Participation is being measured to the amount the participants are acting and discussing within the groups. However, research has proved that interventions of the educator are frequent and give more direction to the discussion then those of the participants. In most of the cases the members of the group do expect the educator to have special knowledge which should be transferred. In case the educator will act in a different way, this might cause the danger that participants, during their discussion, will act in a way they suppose the educator expects them to do. Within this conception of the educational process, the educator always used to play the role of an animator. However, it is now being questioned whether he should also assume the role of person transferring knowledge. So the apparent quality is now under discussion. It remains important for the educator, to be aware of the fact that, from a certain point of view, he has more knowledge, which in certain cases enables him to create a position of power. The educator should look for ways to handle this situation, without lapsing to the traditional and hierarchical relations. In that way the educational demand of the participants can be satisfied. This correction of the sterile principle of equal participation by the educator and the group members should not lead to the re-establishment of hierarchical and undemocratic relations. The surplus of knowledge of the educator should be coupled with a democratic structure of the learning process (Martinic 1988).

Stating that power relations should be abolished is quite different from starting a dialogue and substantiating democratic relations departing from different positions in knowledge. This process should actually enable the recognition by all participants of the valuable contribution of knowledge.

(b) The methodological process
Related to the preceding subject, the way in which the methodology of popular education is given its content, is being criticized. Too often methodology is being conceived of as a series of technics the educator can work with, without indicating how it should be given shape, and what the contents of this process would be. The educator lacks a starting point to

initiate processes of change. The educational process is a complex one and the educator should be well equipped. The notion of a methodological attitude is more important in this respect than a methodological application.

In this vision the educator is considered to be a specialist, who should have the possibility to qualify, thus avoiding the danger of a mechanical use of methodology. Until now a training process to professionalize the educator has been lacking. The educational process comprises various dimensions and elements. The dialectical method has often been considered to be the only correct method to be applied in the educational processes of popular education. However, it has often been used in a mere schematic way, without providing it with any content: take practice as a starting point, abstract and analyze, and return to practice. It is important in this context to link the methodology used with the contents of the educational process. One of the important elements in this process is identity, linked with participation, social change and the concept of modernization (the changing economic and social development requiring different approaches). The link between the aforementioned four elements should be pursued during the educational process. It concerns a strong internal identity of a group, a sense of mutual solidarity, participation and contribution to the attainment of a different social reality, and a form of autonomous development within the process of national development. Popular education should not adopt a defensive attitude with regard to modernization processes but it should also look for possibilities to deal with it in a creative way and develop the necessary facilities. In that way a rather static vision with regard to the cultural identity of the group, to society and to development of closed communities, can be avoided.

Another discussion concerns the assimilation and transition of micro experiences to a broader framework (the formation of associations), without loosing the characteristic features of the group. Up to now it has hardly been possible to realize this transition. The question arising is about the autonomy of the group. One of the objectives of popular education is to safeguard autonomy. Complete autonomy would hardly be possible, as a group during a learning process will always be dependant on resources from outside and therefore will have connection with an institute it works with. The pursuit of autonomy should be placed, as had been said before, within the framework of presenting possibilities and skills for decision-making and acting autonomously. A close cooperation between all kinds of social movements is desirable. The problem of power appears in case associations are concluded with trade unions and political parties. The appreciation of the political power of social movements is of great importance and relevant in itself, and should not be reduced to a supporting force of political parties (Cetrulo 1988).

The relation between the organization (in this case popular education programmes) in Latin America and the financier, is an aspect that should receive due attention as well. In some cases this relation could be compared with the one between grassroots-level groups and the umbrella organization they work with. The question of autonomy has already been described before. The relation always is an unequal one. In many organizations one can note the existence of a large gap between those carrying out research and those working in practice. This causes changes in power relations which could block the internal processes and the dynamics of the group. In the relations with the financiers programmes and proposals to be taken up for financing are becoming important. Experience shows that the direct-action mindedness, which was criticized before in this paper, often gets priority. Carrying out investigations about the practice of popular education, the improvement of the relation between methodology and contents, the development of long-term strategies etc. are always considered less important, although these are needed to provide practice with broader and coherent contents.

A structural financial support for research and less actions directed at short-term successes is necessary. Moreover financiers should be critical as far as trends and fashions are concerned. However legitimate these new aspects may be, they should not prevent the development of a long-term vision.

(c) Women's programmes

Apart from the aforementioned aspects, a number of specific problems do apply when working with women's groups in popular education. Social practice of women is full of experiences of repression. Taking the principle of the specific identity of a women, as a starting point, makes it possible to change the typical female role and to become a social actor who is able to change the circumstances. To realize this, new pedagogical ways should be found. In many popular education programmes attention is paid to the organization of production programmes for women. However, it should be taken into consideration that women often do already have a full-day's working programme. At the same time women are the persons most affected by economic crises. The contradiction between the improvement of the family conditions (extra work carried out by women) and the deterioration of the conditions of life of women (their tasks are not going to be relieved) is never stated explicitly. The fact that women are willing to take on these tasks should be connected with their economic and social situation. Economic activities should not be organized without taking this aspect into consideration. In many cases this underlines the traditional gender specific identity of women. In many programmes this question does not get any attention and therefore the role of women is being confirmed. Research should be directed at the question how programmes - especially organized for women and directed at the improvement of their circumstances - still reinforce repression of women. Research should also pay attention to the economic result of these programmes, as these are often disappointing.

Creating relations between grassroots-level groups, social movements and women's movements is a specific problem. Grassroots levels as such could be conceived as social movements when they focus on social and cultural change, and on the creation of their own specific space parting from their social and cultural identity.

The mere fact of the existence of smaller grassroots-level groups does not assure the existence of a larger social movement. A women's movement should therefore come through, enabling smaller groups to derive strength from the existence of this broader movement. Such an autonomous women's movement has more possibilities to represent its interests in society. This is a prerequisite to initiate changes within the family and in mixed social and political movements. How the relation between grassroots-level groups, social movements and women's movements should be established or improved needs further investigation.

The last topic concerns women's problem as a fashion. The fact that in any given organization women's problems are an issue, does not necessarily contribute to the emancipatory process. It can even strengthen the subordinate position of women. An educational process based on gender issues is therefore needed. Working with women should get its specific character and should be based on 'education for differentiation' taking as a starting point the specific identify of the group (Valdés 1988).

Some reflections on the future of popular education

As can be concluded from the description above, theoretical as well as practical shifts are taking place in the field of popular education. For the practice of popular education this includes some consequences that should be elaborated in the future. In the subsequent paragraphs some points of attention will be mentioned to be considered in the practice of popular education, as well as in the formulation of theory.

The methodology of popular education is an aspect needing attention. This methodology has often been conceived as a series of technics, although it rather should be a principle to be followed. In this respect an analysis of the learning process and of the acquirement of knowledge is important. Many discussions on popular knowledge are taking place, but little is known about the specific knowledge of e.g. farmers, indigenous populations, women. Within this framework, methodology should not be conceived as something standing apart from the contents of the educational process but as being closely related to them. The integrality of methodology is therefore an important issue. The integration - in a coherent way - of the various dimension of reality should serve as a point of reference for the educator. The educator never can, not is allowed to use all the elements during the educational process, as integrality is more than the sum of the various dimension of reality. A choice has to be made, based on the needs and demands of the participants, and of their daily practice. More knowledge is needed and more research should be carried out concerning daily practices of the grassroots-level groups. The same applies to the development of alternative methodologies.

The results of learning processes in popular education have never been considered explicitly. Analysis mainly focused on participation processes and hardly on the results of learning. As a consequence, processes and methods used often were not in harmony with the aspirations of the participants. Implicitly the educator pursued all kinds of objectives but these were often unclear to the participants. Only in case the process and the results to be achieved are clear to all those participating in the educational programme, elements of surprise can be avoided and a coherent process can be initiated.

In this context in becomes clear that the educator should be someone who starts an educational process, instead of only being an 'animator' or 'facilitator'. He/she should be a specialist making explicit the objectives and ways that lead to these objectives. The process of knowledge acquirement is absorbed in the process of popular education in that way. The assumed equality of educator and participants can be discontinued so the mutual relations and the process in which they are being formed, will become clear to everybody. The danger that the often used principle of participation will turn to its opposite - taking the knowledge and experience of the participants as the only basis without generating new knowledge causes that a process of knowledge acquirements becomes impossible by definition - can be avoided. New forms of relations and cooperation based on a dialogue should be searched for, without falling back to the old traditional hierarchical structures.

A further professionalization of the educator is necessary. Giving shape to the processes of popular education is complex, but should provide the educators with instruments representing more than only a series of technics. Various moments of reflection should be integrated in the daily practice of the educator. In case popular education is really going to become an alternative model of education, it should in any case start from the following principles:

- the grassroots-level movements have their own educational demands;
- this demand should be understood and be answered in the educational process;
- popular education plays a specific role, that should be different from the traditional role of education, but should not ignore the educational aspect.

To elaborate these principles the educator should get the opportunity to deepen and broaden his pedagogical knowledge.

Until now popular education aimed too much at short-term results. More reflection is necessary about long-term strategies and how these could be realized in practice, when working with grassroots-level groups. The specific context in which the educational process takes place should always be included The subjects of popular education are not homogeneous and neither are practices of popular education. Popular education is therefore by definition an education for differentiation (*educación para la diferencia*).

Ignoring the necessity of research and systematic analysis of the practice of popular education resulted in the failure of many activities and experiences. Research should therefore play an systematic role within the practice of popular education. This could also contribute to closing the gap between theory and practice. Those engaged in practice should play a clear role in these research and the systematization processes, to avoid the danger of research being conducted in isolation of practice. There is a need to investigate how new forms of research (apart from participative research) can be developed.

The step from micro-experiences to a larger social movement needs more research. Too often small groups keep being isolated, without having or getting a political dimension, and without advocating their own identity. In that way popular education cannot be realized. The way in which the organization can be strengthened; how political power and the own identity aimed at social change in the own specific context could be realized, should be clarified by starting further investigation.

Note

1. Marginal groups are being seen as those groups who are not able to participate in certain fields of society (political, social, cultural, economic).

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13.

Participatory Education and Cultural Identity: the Experience of an Experimental Project in the Vaupés, Colombia

Jan Ooijens

Education in the National Territories of Colombia has been neglected. This is due to the long distances and the deficient modes of communication, added to other factors such as the scant interest shown by the central authorities, the lack of initiative and the poor local human resources. In 1978, the Colombian and the Dutch Government together designed a bilateral project with the objective of developing an educational model for these Territories. This chapter provides some background information on the project, referring to the applied educational model and dealing with the factors which have influenced the development of the educational process.

In 1978, the Colombian and the Dutch Government designed together a bilateral project with the objective of developing an educational model for the inhabitants of the National Territories of Colombia. The project lasted from 1978 till 1983 and the experimental application took shape during the years 1981, 1982 and a part of 1983. The aim was to adapt education to the cultural, geographical and economic conditions of the Indian groups living in this region.

A central point in the experimental application was the cultural identity of the group for whom the model was intended. During the first stage - the stage of preliminary investigation - an ample and profound research was carried out into many aspects of the culture of the population of the National Territories, and in particular of the Vaupés. In the experimental application, contents and educational materials were worked out, which were based on the authentic knowledge of the Indian communities.

During the entire process - which covered investigation, defining priorities and means, and curriculum development - the principle of participation was the prevailing and vitalizing element. The central idea was that both culture and technique are part of the heritage and mode of expression, and that for these people education is a process whereby the principal actor educates himself as an individual and as a member of society. It needs to be stressed that ethnic survival goes hand in hand with the affirmation of cultural identity; without this, any dialogue with the other society, as well as assimilation of elements contributed by the latter, are impossible.

Section 2 of this paper provides background information on the project, the design of the experimental part of the process and on some general facts about the Vaupés. Section 3 refers to the applied educational model. Section 4 deals with factors which have influenced the development of the educational process. Without wishing to belittle the importance of the internal pedagogical aspects, this paper refers to two central problems of the educational process and to power factors which have determined the project and the process from outside. For this paper extensive use has been made of our book *Education, participation and cultural identity*[1].

The experimental project

Antecedents

Education in the National Territories of Colombia has been neglected. This is due to the long distances and the deficient modes of communication added to other factors such as the scant interest shown by the central authorities, the lack of initiative and the poor local human resources. The educational situation in the National Territories can be summarized in three observations:

- The concept of education is limited to school activities for children, without including extramural activities which facilitate a process of permanent education for youngsters, in particular, and adults. As a consequence, education appears not only to be limited to one stage of life, but also to constitute an abstract and isolated reality, bearing no relation to production and human existence in general.
- The curriculum contents and the learning methods employed in school work were originally designed for a completely different social and economic environment. They do not respond to the living conditions of the various groups of Indians, settlers and *llaneros* (people of the plains) nor to their development needs.
- The teachers, the majority of whom come from the interior of the country and who are trained for a different environment, feel lost in this totally new milieu. They are unable to understand the physical environment, the mental categories of their pupils and in general fail to respond to the socio-economic needs of the population.

As of old the education of the Indian groups was entrusted to the Catholic Church. Missionary communities took care of education as part of the first order of their mission, which is to bring the gospel and civilization. This situation was legally consecrated through an international treaty, the 'Agreement of 1887', and reinforced through successive mission conventions.

In 1953, the prelates in charge of these missions received from the National Government the powers to direct and control education in the areas where their respective missions were operating. This implied the right to set up and to move primary, secondary and vocational schools, as well as the right to appoint, promote and dismiss teachers and to set their pay-levels. It also gave them the opportunity to make sure that the teaching accorded with the Catholic norms and ethics. Although this last disposition was not official, the fact that the only authorized centres were always run by mission personnel guaranteed this effect.

Since the last reform of the Agreement in 1973, the State has largely assumed control of education and has established mechanisms - including a set of contracts - through which to organize the teaching offered by the missions. The new form of contract education is established in Decree number 2768 of 1975, which lays down the basic rules for the celebration of the contracts between the Catholic Church and the Colombian State as far as the practice and administration of education is concerned, and in regions where this is applicable.

With this new legislation, the State assumes both the right to inspect and to control the educational centres, as well as the right to control the appointment of teachers and administrators. Moreover, the contents which the Catholic Church imparts, are defined by the National Government. The current situation is very different from the previous one in which the presence of the State in the regions where the missions were active, was very limited, if not completely absent.

The mere presence of the State, however, does not ensure a change for the better in the education of the Indian communities because, up till now, things that concern the Indians have always been arranged without consulting them. Nevertheless, it occurred to the people responsible for the development of official educational policies that the situation needed some reconsideration. They acknowledged the necessity of looking for educational models which are more in line with the actual living conditions of different groups and with the needs of their development. However, the importance of the notion that specific attention needed to be paid to the ethnic minorities which, in the case of Colombia, consist of Indian groups, was illustrated by the fact that it was included in the 'National Integration Plan 1978-1982', but was later withdrawn in the plan 'Development with Justice 1982-1986'.

The design of the experimental project

In 1978 a group of specialists from the National Planning Department (DNP) of Colombia was aware of the fact that the educational model applied in the central regions of the country did not answer the needs of the people living in the peripheral zones of the National Territories, so the group decided to look for an educational model which was suitable for these people.

The objective was to design a specific educational model which could meet the needs of the various groups living in the south-east of Colombia. This model should, at the same time, take into account the living conditions and the cultural characteristics of the said people. This being settled, a decision had to be taken on how to go about the development of such a model. On April 5th 1978, an agreement was signed between the Government of The Netherlands and the Government of Colombia for a project of technical co-operation called 'Design of a model system of education for the National Territories'.

This first project was divided into three steps. The first one was to study two regions, the Great Vaupés and the Guaviare; these were considered to be 'typical' regions because of the type of population being forest Indians and settlers. The second step was to finish the study of all the remaining areas and to elaborate on some specific studies. The last step was to produce a regional typification as well as the design for the model system of education.

However, the results of this mainly theoretical research project would not lend themselves to immediate and practical application by the Ministry for National Education and its Departments. In other words, the educational model would not be useful straight away for the Indian groups concerned, because of the general 'typification' and its purely theoretical nature. Apart from this, the study was based on some educational schemes which had not yet been tested. As a consequence, a second phase was proposed in order to apply the designed model on an experimental basis.

Institutionally, the second project was under the auspices of the Vice-Minister of National Education. This facilitated co-ordination and implementation of the project with the various departments of the Ministry.

On the Dutch side, the Centre for the Study of Education in Developing Countries (CESO) was given an advisory role.

Because of some highly favourable factors, the Vaupés was selected for the experimental stage: its Indian population being representative of the Amazon region; the presence of the Maria Reina college, where Indian teachers were being trained; the fact that the Apostolic Prefect, who coordinated most of the education in the region, was positively inclined towards the initiative. Mitú was chosen as the project base and the project area would also cover the population centres along the Central Vaupés river (which includes the Cuduyarí river) and the Papurí-Paca river.

The Indian Vaupés; general aspects

The region of the Vaupés is situated in the North-East of the Columbian Amazon jungle. This means that the possibilities of communicating over land within the area are limited. The geographical structure is defined in the centre and to the north by the river Vaupés and the river Papurí, and to the south by the rivers Tiquie, Piraparaná and Apaporis.

In a political-administrative sense, the area is divided into four large municipalities: Mitú, Caruru, Yavaraté and Pacoa. In 1910, all these regions together formed the *comisaría* (administrative centre) which was called the Great Vaupés. More recently the area was divided into smaller *comisarías*. The region in question measures 65,268 square kilometres.

According to the data of the latest 'Population and Housing Census', the comisaría of the Vaupés had 18,935 inhabitants of whom 21% lived in the four municipal centres; the rest lived in smaller settlements. 70% of the total population lived in the municipality of Mitú - the capital of the *comisaría* and the seat of the political and ecclesiastical authorities - together with almost all of the white people in the region, most of whom were government officials, missionaries or merchants. In addition, there were some intermediate settlements of between 200 and 400 people, situated mostly along the rivers Papurí and Paca, which make up some sort of 'urban network'. Then there were more than 200 hamlets with an average population of 50 people. Finally, in the south of the Vaupés, a traditional kind of settlement prevails, called *maloca*, which is a simple single residential unit.

The presence of the whites

Since pre-hispanic times, the Vaupés has been a place of settlement for

forestry-based communities, which through a long process acquired the characteristics of the delicate ecological equilibrium of the humid tropical forest. These communities, in demographical terms without doubt much larger than what they are today, involved a socio-cultural system with certain common features and a network of mutual relationships concerning matrimonial interchange and other types of bonds, which still today can be described as a relatively uniform cultural complex, though it does not constitute a socio-political unity.
From the 16th century onwards, the region has had to endure several white influences (ideological, economic and political) whose common target has been the conquest and submission of the natives.

The different instances of the presence of the whites in the Vaupés have contributed, though in various ways, to the one objective of incorporation and domination of the area and the native population. Some examples of the most apparent consequences of this presence in relation to the population as well as to the ecological system are:

1. By grouping the indigenous communities in western style settlements, the missionaries not only destroyed the *maloca* as a symbol and measure of the basic population unit, but they also brought about the exhaustion of the food resources forcing the communities to cover long distances in search of suitable land for tilling. Besides, evidently the missionaries are to blame for the destruction of traditional culture, the rites and ceremonies, the symbols and instruments, as well as for the disintegration of family and society. All this in order to bring the gospel and civilization.
2. The rubber gatherers (*caucheros*) created a new form of slavery through violence and indebtedness. They submitted and overrode the native manpower, reducing the required human resources for production and contributing to the disruption of the family and social unity. Also, together with the merchants, they introduced new tools and household goods, which soon became indispensable, while the traditional daily objects disappeared.
3. Narcotics hampered the traditional production activities, created an artificial scarcity by flooding the region with money that had been scarce before; it stepped up the rhythm of substituting consumer goods and changed the ancestral use and meaning of coca, particularly among the young.
4. The introduction of unknown crops, especially of cattle feeds, by the prefecture and the SIL (Summer Institute of Linguistics), has contrib-

uted to the transformation of the ecological system and the exhaustion of the soil by large-scale deforestation.

5. A decisive element, contributed by the white society, has been the invasion of certain white technology into the lives of the Indians through instruments, technical processes and daily household goods, from the *machete* (cane knife) and other useful equipment for agriculture, the shotgun that facilitates hunting but also keeps game away, kitchen outfit, motor boats to the tape recorder. In order to get all these goods, the native depends more and more on the merchants, the *caucheros*, the *coqueros* and the warehouses, stores and co-operatives connected to the mission. This technological invasion takes place in a specific framework which regulates its influence. The native society finds itself brutally treated by another dominant society on which it depends. There is a sharp technological imbalance, which plays a decisive role in the process of confrontation and domination, forcing the indigenous societies to a reflection of their own technology, and finally, themselves.

Some of the consequences of the invasion of the whites have already been mentioned, but there are others of an ideological character, whose presence is perceived in the educational process. In the first place, more than seventy years of missionary preaching have made these communities accept the notion of superiority of the whites and of everything coming from the external society and, consequently, caused them to feel ashamed of their own traditions, their history, their customs and even of their clothes.

On the one hand, the situation described above is felt in the bitterness of the older people, who see themselves forced to hide in order to practise their traditional ceremonies, who sadly remember the destruction of the clothes and ceremonial instruments considered as pagan, superstitious and barbarian, and who indicate how their own history is beginning to fade, especially among the new generation; on the other hand, it is perceived in the attitude of the young people, eager to assimilate to the white society, whose customs and values they try to make theirs. The generation struggle is mainly about cultural aspects and values, in which the ceremonies and dances are replaced by tape recorders, modern dances and white music, *chicha* (a kind of beer made of fermented maize) by liquor and the *mambeo de la coca* by *bazuco* (subproduct of the coca).

The native population

According to the latest census of October 1985, the native population of the Vaupés numbers 15,377 inhabitants. That represents 81% of the total population in the *comisaria* and one-third of the Indian population of the Amazon region of Colombia.

In the physical-ecological sense, the unifying element in all communities in the Vaupés is the forest, while the differentiating element is the riverside or interfluvial location. The majority belongs to the riverside type, characterized by agriculture as its basic economic activity, whose chief alimentary product is the *yuca brava* (or *mandioca*, plant with edible root) and by fishing, hunting, collection and fabrication of instruments as complementary activities to the economy.

The interfluvial type is composed by the Macú, a smaller population, who practise a nomadism depending on hunting, fishing and collection and on complementary activities such as making baskets, hunting and fishing instruments,and the preparation of *curare* (vegetable poison). Socially, they are subordinated by the riverside groups to the extent that their behaviour towards them is like slaves towards their masters.

The criterion for social and cultural organization is directly related to language as the primary instrument in the elaboration of mental categories and as a basis for the view of the world, which allows each group to form an explanatory theory concerning the surrounding reality. The Vaupés is especially interesting for its multiplicity of languages and also of linguistic families within a small group, with limited territorial extension, and facilitating communication along rivers and canals. Such a fact explains common social and cultural features in almost all the communities: exogamy, in most of the cases, determining the creation of family units; generalized multi-linguism whose origin is found not only in the existence of exogamy, but also in the communication needs in each group, as well as among them; similar social organization of each community, of relations among the communities, based on the *maloca* as the communitarian family unity, as the symbol and basis of the political and social hierarchy; mythical explanation of the universe and common history, with small variations related to the particular group and the places with which it identifies itself.

Language constitutes the element of identification for each community, besides other relating factors such as vicinity or distance, which are coincidental given the voluntary or forced mobility of the groups. In the Vaupés region each community speaks a language regarded as its own and which is different from those spoken by their neighbours. The members of a group inherit their father's group language; the filiation in the paternal line is decisive for marriage prohibition between members of the group (with exceptions in some groups); this implies that an individual usually perfectly manages the language of his father's group, his own language and that of his mother's group. Due to the close relationships, and to the social, economic, exogamic, ceremonial and ritual interchanges among communities, an individual will usually speak more than two languages, a phenomenon known as multi-linguism. The Montfortanian missionaries raised the language of the Tucano community to the level lingua franca; nowadays it is still in general use among some communities in the Vaupés.

The applied education model

The theoretical elements

In the experimental project, the underlying educational theory is based on a series of hypotheses, which have been subject to discussion during the last thirty years, particularly among specialists in education. The most relevant statements are made in what we call the Third World. In the case of Latin America, the experiences as well as the discussions have been related to the search for social liberation, in other words, liberation of the poorest classes. Of great importance are the reflections on liberation theology and, in the fields of research and pedagogical practice, the works of the Brazilian Paulo Freire, all related to the situation of the oppressed and to the possibilities for their liberation.

The underlying educational theory questions a whole series of assumptions and traditional practices, which have for a long time featured in the educational processes, particularly in the formal school model. The most important new ideas are:

- Education is not limited in action or time, but it is practised at every moment and through any experienced action. This is known as permanent education. In adult education - or education in general - the idea was born that education is to be functional, in other words, that it should take into account the needs of the participant and his concrete conditions.
- A second hypothesis of the new theory is about the subject of the educational process and the educational agents; the subject of the process, the participant, is considered as the first educational agent. The learner starts with his own wide or limited experience. The most important role of the teacher is not to teach his own knowledge, but to help the participant to assimilate his own experience through critical reflection. Only after this assimilation can the learner make another person's experiences his own, not the other way round.
- The educational process is considered as a search, including all the steps and moments normally implied. Education is a finding process which

follows the fundamental steps of scientific research. Essential in education is not learning about things, but learning about how to learn.

- With regard to the above mentioned concept, the new educational theory considers the human being as a unique and integral whole and human activity as a necessity and vital manifestation in which theory and practice constitute two poles which need and complement each other. In this way, education is seen as an integral and integrated process of the harmonious development of all human capabilities. The natural object of reflection is the daily practice, whose analysis produces the theory which reverts into practise, in other words, in reflective acting. Mere action becomes activism, while reflection converts it into an enriching experience. The theory alone is nothing but idealistic speculation; however, in the sense that the action is at the same time its beginning and its end, it acquires sense and turns into practise.
- In the last years participation has acquired special relevance, being at the same time theory and methodology. This meant, on the part of the educators, giving up their wise man's image, sole holders of the truth, and their change into apprentices, in search for knowledge on the same level as their pupils and in dialogue with them. The learner himself defines the priorities, and not the actors from outside. The latter only play the role of 'animators', sometimes initiating the process: they must always be aware of being external actors who only through dialogue can stimulate, change or influence the process. In all phases of the process, including that of defining the programme, not only during the research, it is necessary to accept this consequence.

In fact, the educational process itself will provide the communities with the necessary instruments to guide them to their goal, which of course will clash with paternalistic attitudes and with the interests of those who pretend to maintain any type of control, particularly the ideological and political powers. In this sense, education is liberating.

The components of the model

The different elements of an educational model are many. We mention only those which, being considered basic or prominent, are at the same time decisive in the process and easier to understand: needs, contents, educational agents, means and methodology.

First of all, it is necessary to take into account the identification of the educational needs of the target population.

In the specific case of the native communities of the Vaupés, their contact with the white society has meant asymmetrical relationships of cultural, economic and political domination, which put them in a situation of decline and even in danger of total disappearance. Without lapsing, on the one hand, into the idealistic dream of returning to the physical and cultural past and, on the other, without accepting a destiny of destruction by the advance of the civilized society or incorporation with exploitation and submission, the elaborated educational model pretends to respond to the survival and development needs of these communities on equal terms with the other groups that make up the national society.

The most important need of the Indian groups of the Vaupés is that of their own survival. First of all, the physical survival which has been endangered by the disruption of the ecological equilibrium due to the various effects of white invasion: concentration of the population, which had been dispersed before, in larger villages with poor soil for agriculture and scarce hunting and fishing resources, the impact of narco-traffic which meant abandoning the traditional crops, for fresh food by canned food, the rise of the prices of basic goods from other economies and even of the goods internally produced like *fariña* (flour extracted from the root of the mandioca plant). The consequences of such situations are easy to foresee, specially in the nutrition and health aspects, and are aggravated by the appearance of diseases unknown before, an additional contribution of the presence of the whites to an already accelerated decline of the groups.

Concerning the educational aspect, and as an answer to the problem of physical survival, it is imperative to resort to ancestral knowledge in order to manage the environment (physical and ecological), on whose equilibrium depends the recovery and preservation of the sources for survival. Ethnic-cultural life is also exposed to dangers of destruction, which are even more serious since they are much more subtle. Unfortunately, in this field the role of exogenous education has been a disaster in its various channels: religious proselytism of various doctrines, formal educational system, problematic communication and means of transport, intrusion of a dominating and dazzling technology which calls to mind the times when the Indians exchanged their treasures for mirrors and other trinkets. Therefore we stress the need to turn back to the traditions which form the cultural core of these communities, the basis of their own identity as specific ethnic groups.

In either case, whether it concerns cultural or physical survival, what matters is not only to preserve what still exists but, first of all, to recover the traditional scientific, technical and cultural knowledge which has long been submitted to a systematic overthrowing process and, as a consequence, has been largely forgotten.

The second educational necessity, related to the objective of change, is the necessary development of some communities whose stagnation would mean death. In this respect, whatever theory is adopted in relation to the more or less accelerated character of the change, it is a vital principle that it cannot be imposed from outside, but has to come from inside and shall be in harmony with the characteristics of the groups. So the elements of change are much more related to what is coming from the other society, being here the major national society, the relations with which were always of a type of domination-dependency.

The objective of the educational model applied in the native communities of the Vaupés, is transformation - foreseen and already in process - without the risk of genocide or ethnocide. The role of education is dual: first, to contribute to the assimilation of the new knowledge - scientific, technical and cultural - and of the exogenous values permitting the groups to use them without depending on them; second, to prevent assimilation reaching the point of losing what they have got, but to bring about an integration of the exogenous into the endogenous, founded upon a firm base of social and cultural identity, which stimulates the proper handling of the environment.

According to the needs, in the case of the groups in the Vaupés, the educational contents deal with the knowledge and understanding of the physical and ecological environment of the Amazon jungle; with the assimilation and comprehension of the social structure and the economic, social and cultural development of the Indian communities, according to the types and subtypes characterizing each group; with the acquisition of knowledge and skills, both conceptual, technical and artistic, for the transformation and preservation of the resources found in the surrounding nature; with the knowledge and handling of the necessary instruments, so that every community achieves, through an exact understanding of the characteristics of the wider national society, an active and participatory integration with that society, in the same conditions as the other groups, without losing their own social and cultural identity.

All the actors involved in an educational process, whether they are the 'teachers' or 'pupils', are educational agents. However, here only the former are considered as agents, given that the latter are really subject to the process.

The model proposed using all the agents of the region and, particularly in the community, their co-ordination in order to achieve a homogeneous educational process. That is the reason for defining the profile of the different educational agents for the native communities according to the existing educational needs, the defined educational contents and the socio-cultural characteristics of such communities; what is needed is a definition of the training needs regarding to the endogenous agents (mainly related to the knowledge and concepts of the white society), to the exogenous agents (knowledge and understanding of the physical and ecological environment, the socio-economic structure and the cultural tradition of the communities) and training needs corresponding to either type of agents.

In addition, among the composite elements of an educational process figure the means or instruments, such as spoken and written language, gestures, images, music, dance, theatre, graphic or plastic materials, shops, laboratories, museums etc. Naturally, the most adequate means and didactic materials are those corresponding to the contents, easy to handle by the educational agents and accessible to the subjects of the educational process. This means that their preparation has to be based on the physical and social environment and needs to reflect the perspective, the mental categories and the language of the people. Therefore, the best materials will not necessarily be those prepared for other groups, nor those derived from the latest technological innovations of industrialized societies. Nevertheless, taken into account the dispersion of the population of the National Territories of Columbia and the difficulties of communication, distance education, especially little media, are very important. Active participation of the groups in elaborating the different materials - written, graphic, plastic, audio-visual - and in the use of these means in general, is necessary.

In the proposed methodology education is considered not only as an individual, but as a social process, and it is actualized in the methodology of communitarian participation which is planned in all the phases of the finding process: initial participatory research which includes not only collecting information but also the elaboration, processing, analysis and interpretation of the data; participation in decision making, implying the acceptance or rejection of an option and its possible consequences, the definition of priorities, the selection of the appropriate resources, instruments, etc.; participation in the programme, in the stages of design, implementation and development; all this to achieve an autonomous handling of education by the communities. Participation cannot be restricted to mere co-operation, as informants or assistants, but the community as a whole being the subject of the educational process, the purpose is to achieve active incorporation of each and every one of its members. This incorporation is basically accomplished through open dialogue, permitting the use of all contributions, both from the endogenous and exogenous agents, as well as from the subjects of the process.

Important elements of an educational process are the forms and modes. Given that participation in research, definition of priorities or in the design of the programme is specially feasible for adults, not a normal school phenomenon, the education model for the National Territories demonstrates the action and processes of a nonformal and informal character, without ignoring the role of the formal school mode. In contrast to a practice of separating and even excluding modes, what is required is a comprehensive view of the process in its different stages, where the modes interrelate, integrating school, semi-school and out-of-school activities.

Related aspects to the modes of education are time and rythm (calendars, schedules, continuous, periodical, intermittent, occasional actions) and places (classrooms, shops, laboratories, open field, work space, recreation room, etc.) to develop the educational process. In the project it was proposed to free the educational process from the inflexibility which had always characterized the formal school system. There is no exclusive educational time or place, because the process is integrated in daily family life, working and communitarian activity. Therefore, time corresponds to the activity, and the places are all those where the community as a whole, the particular groups and the families carry out their activities: working, gathering and recreation places.

Consequently there is no reason why activities in the school should be separated or opposed to those taking place, for example, in the *maloca* or in other meeting or communitarian ceremonial places. The model intends to acknowledge and stimulate the educational character of all family and communitarian activities, without regarding the place or moment.

A fundamental aspect of the educational process concerns the interrelation and integration of all different elements of the educational process. Such integration is achieved by the subject of the process, who receives, assimilates and incorporates the actions of the educational agents through the different ways and means. It is desirable, however, indeed essential, to see that such actions are not haphazard or incidental, but previously co-ordinated and integrated. In this respect, it is the duty of the state, being responsible for the education of the entire community and each of its members, to establish an educational system which accomplishes these objectives of integration of the educational processes through the workings of agents and modes, and which also permits a co-ordinated active and effective administration. At the same time the state, being responsible for the economic and social process, ought to establish external contacts between the educational services and the connected sectors, within a framework of a coherent development policy.

The educational process: two central problems

After the objectives of the educational model had been operationally defined and geared to the Indian communities of the Vaupés, the aim was to implement an educational process in order to accomplish the objectives.

Throughout this process, different methodological problems arose. The study of the environment and the language problem needed particular attention.

The study of the environment

In the project, the study of the environment was in a more advanced phase according to the participation methodology: this was not done because of research priorities, or in other words, to discover new knowledge for the scientific community, but for educational purposes, as a way to learn how to learn. In this case, the participation of the pupils, subject of the educational process, in an exercise of scientific research, was not the only goal, nor was it just to gather knowledge for these pupils, but to tackle both aspects at the same time. This means that the participants are at the same time the makers and the receivers of the study to which they contribute, each according to his capability, the basic information in a communitarian way through dialogue, analysis and interpretation.

In fact, the knowledge produced till now about these regions and their communities, both by the social sciences and other disciplines, belongs to a perspective different from that of the educational subject, even if he was used as an informant in any stage of the fact finding process. It has always been outsiders' knowledge, which represents the perspective of the one who has gathered and organized the information, elaborated, processed and analyzed the data, stated and verified the hypotheses, in other words: the researcher's perspective which approaches the matter from a theory of a different context. What was intended by participatory research was precisely to obtain the view of the subject of education and not that of external observers.

As is natural in any dialogue, in the beginning full participation was difficult, but it got better during the process. The initiative, not just to realize the study of the environment but, in general, to design a special educational model, was left to the project staff as external encouraging agents. However, from the moment that dialogue was established and accepted by the communities, the idea to join hands in order to achieve the objectives stated in the project caused the degree of participation to grow, while the influence of the external team diminished.

It is important to point out that, whenever the external agent tries to force the rythm, he may ruin the entire process. The acceptation of joint work was not easy to achieve. Besides the language barrier - the autochthonous and Spanish language represent basically different ways of thinking - there was an ambience of distrust from the start, apparently justified since the communities had the feeling that previous researchers had exploited them. They had come only to hunt for information, and having obtained what they needed, after having used the Indians as mere informants, they returned to write and publish their degree theses, without leaving any benefit for the communities. On the contrary, probably the obtained information might effect an easier and more definitive domination of them by the white society.

Once guarantees had been stated by the project, promising that all the outcomes of the joint work to be done would return to the communities as their property, participation began to grow, in the first place in determining the study areas and designing the instruments for research. Therefore the basic question was, what should be found out in order to obtain a clear and not distorted picture, as complete as possible, of the community and its context.

In this first task, those participating at the start were the leaders and the educational agents, and later on, through open dialogue, most of the adults of the communities. Similar participation was observed during the identification of the sources of information: acclaimed community experts on each one of the research items. In this respect, the contribution of the project team was mainly in helping to organize eventual systematization and in encouraging through suggestions and questions. During the preparation of the first instruments it was easier to recognize the style of the technicians of the project. However, as the work advanced, the answer to a question brought about new questions and suggested new perspectives. Thus it became necessary to reconsider the first instruments, elaborated initially as filing cards, as mere guides which should maintain the highest flexibility and adaptability to the needs and characteristics of each region and to the symbolic autochthonous capability for the transmission and expression of culture. Besides, the use of the instruments depended both on the communities and on the external animator. In the subsequent organizing phases, analysis and interpretation of collected information, participation, particularly of the endogenous educational agents, increased when they began to consider the produced knowledge as their own. The project team assumed a more critical attitude by putting questions which reflected the external perspective, while the community as a whole, particularly the older men and the experts, assumed a role of supervision and explanation.

The language problem

A native language constitutes the basis of cultural identity, since it is not only an instrument of communication, but also the basic tool in the structure of mental categories and the organization of knowledge. The language problem becomes more complex in a case such as of the Vaupés, where the multiplicity of linguistic groups, together with the phenomenon of bi-linguism, multi-linguism and the small numbers native speakers in most of the cases, requires a careful handling of the problem.

Dealing with the native languages of the Vaupés entails specific problems which have called the attention of the specialists, but particularly it has consequences for education. Because of bi-linguism and often multi-linguism, on the one hand, every individual feels bound to communicate in at least two languages, while the needs for wider family, social and economic interchange keep increasing that number; on the other hand, none of these languages serve more than a few thousand speakers and in some cases not even a hundred; to this we should add the fact that these languages have not yet found a way to conventional figurative representation, which underlines the importance of intermediate stages of graphic representation.

All this states the need of a special treatment of these languages, which goes beyond merely elaborating grammars under western methods or designed for Indo-European speakers. It is something which has to be tackled with the help of specialists in linguistics, admittedly, but always through a participatory methodology in which the contribution of the communities, from their particular perspective, has to be decisive.

Learning Spanish, in turn, is something which has not been seriously considered by the traditional educational system, which initiated only education in Spanish, without a previous attempt to teach this language, since language training is simply reduced to repeating the same grammar and methods used for non native-speakers. It was observed that children and youngsters who were familiar with two or more native languages felt bound to receive instruction and to be assessed in a language not their own. In fact, only in rare cases have Indians of the Vaupés really succeeded in mastering the Spanish language, even if they had traversed the educational system of Columbia for years. This, necessarily, constitutes an impassable barrier to comprehending the national society. It is really distressing that, after so many years of education among the Indians, and despite the good work of linguists and anthropologists, many people are still debarred from national society.

As an immediate solution to the problem caused by the use of another language, while dealing with the organization and explanation of knowledge, it was decided to use *tucano* or *cubeo* (native languages) as lingua franca in each zone, particularly in the discussion about more difficult items or those of greater interest for the communities. The issue of the history of the groups was discussed entirely in *tucano* by the endogenous educational agents.

Power factors

In order to understand the development of the project, it is necessary to take into account the social and political context in which it was fostered. It is worth mentioning some of the decisive power relations which influenced the project.

Party interests

The idea of the project, in a technical sense, was born in the Division for Education of the DNP (Departamento Nacional de Planeación) and it was conceived along the lines of the educational policy initiated by the liberal regime and developed mainly during the period of the 'Frente Nacional' (National Front) through the planning process. What facilitated the acceptation and implementation of the project was not only the fact that this was proposed during a liberal administration, since there was consensus in this project between the two parties about the universal character of education, and even about the existence and necessary co-existence of the different cultures and subcultures in the Columbian nation. It is significant that both projects, the one concerning the design and the one concerning the experimental application of the model, were created and developed under liberal presidents but conservative ministers of education.

However, it is also necessary to mention the problems which started from the very design stage, when the project was housed in the General Directorate for Training, which at that moment was presided over by a functionary belonging by family and tradition to the conservative party.

These problems were not only related to the selection of a project co-ordinator for political party reasons but, mainly because of the decentralized and open nature as to the diversity of cultures in the project, which clashed with national uniformity and the urban ethnocentric policy of the functionary in charge.

A similar conjuncture, and in this case unfortunately decisive, came about in 1982 with the change of government. Though both the coming and going ministers and vice-ministers belonged to the same conservative party, which would allow political continuity, the sense of change prevailed. Without being interested in current affairs, the new administration pretended to start from zero, ignoring everything done and developed before. This non-acceptation cannot be attributed to ideological reasons and more likely is due to the interference of personal interests, political revenge and bureaucratic division. What was most conspicuously absent was the interest for the culture and welfare of the Indians, and even any concrete theory on education.

Religious and political powers

A factor which certainly cannot be neglected is the ecclesiastic powers, represented by the apostolic prefecture, with its contradictions, interferences, compromises and even its symbiosis with the political powers. It is useless to try to make distinctions between the functions combined in one individual, from spiritual leader of an ecclesiastic circumscription, contractor of the state for the partial control of the educational apparatus, to owner or manager of a carefully built empire based on patience and organization during almost three quarters of a century of missionary activity. There is no doubt that, consciously or unconsciously, and without considering any preconceived notions about preaching the gospel, catechetic education, liberating education, civilization or cultural colonialism, it is humanly impossible to remove an almost absolute and all-embracing power like the one achieved by the catholic missions in the territories assigned to them "for the domination of the barbarian tribes".

That is another reason why it is difficult to determine and analyze the subtle motivations sometimes implicit and subconsciously present in the attitudes and reactions generated by a project, whose objectives were to provide the national state with an instrument which would allow, through the control of education, the direct jurisdiction over the territories of the mission and their inhabitants for the full and democratic exercise of their political rights.

Be that as it may, what was evidently common was an attitude, among the clergy, of expectation, where support and even protection were offered and withdrawn alternately in a subtle game which never revealed the indifference shown by the civil authorities. In fact, the apostolic prefect was present from the beginning, whether in the first field visits, in the preliminary discussions about the possibilities and extent of the project, in the selection of local personnel, which was entirely his responsibility, in the location of the work places, or in supplying logistic support and physical infrastructure.

However, participation and commitment by the schools, agents or pupils belonging to the established education was never accomplished, with the exception of the school for teachers in Mitú, which began to co-operate when the approval from the Ministry came in. Although there was some initial support in providing the boarding school installations and classrooms and lodging the personnel, little by little this support was withdrawn when new professionals, directly selected by the Ministry, were incorporated in the project and who became more difficult to control, particularly due to their ideological orthodoxy.

Besides, the arrival of a conservative president in 1982, more inclined to rely on the ecclesiastic institution and to delegate to it functions which normally belong with the state, strengthened the authority of the mission, which began to demonstrate its unwillingness to accept the presence of 'outsiders', who were undermining the basis of its traditional power.

With the protestant missionaries, contacts were insignificant during the execution of the project. However, it is worth mentioning the case of two communities which initially participated, Santa Marta and Pituna, located near the mouth of the Cuduyarí river, which after long reticence decided not to participate any more due to the pressure of the missionaries. This fact indicates what the results might have been of an experimental application in any of the regions controlled by the missionaries, whose exclusive fanaticism has induced the communities to forget their customs and traditions and to isolate themselves from any other influence but the church.

The will of the Indians

After the Indians had so long been patronized and regarded as incapable of initiative and exercising their will, it was illogical to expect that they would decide freely and spontaneously about participation in a programme which was set up from outside and which apparently did not concern them, since in their view education was something which only concerned the whites. They could not decline the invitation made to them with the consent of the traditional masters, the missionaries from the prefecture. But they carefully selected their representatives, most of them captains, chiefs of communal action, teachers and health promoters, in other words, those who practised some kind of leadership in their community. Of course, in the beginning scepticism and distrust were evident, understandable in view of the behaviour of the whites in the past, who had always approached them with the sole purpose of making big profits, without any benefit for the Indians. Once they understood the real objectives of the project, they agreed to participate and became more and more enthusiastic, particularly in re-establishing the traditions and culture which identify them. This was not only verbally expressed by them on several occasions, but they also demonstrated their interest in the project about the selection and development of the items which in their view were most appropriate for achieving the objectives.

However, the ambivalent feelings in the communities (confidence about being the authors and owners of the produced knowledge, confidence in the work of the project, and at the same time, distrust and uncertainty about what might happen in the years to come, since the definite decisions are made elsewhere) were reflected in the words of an Indian *tatuyo* leader, captain of the Yapú community: "Before, researchers came to ask questions, and afterwards they took away the information to publish their studies with the approval of the government (we ourselves have seen 'Ministry of Inner Affairs - Summer Institute of Linguistics'); but now that we ourselves are making our own study, now that we are studying the knowledge of our communities, who will guarantee that what we are doing now will be approved by the authorities? And when later we teach this to our children, and we try to raise them with this knowledge, how shall we know if this will be recognized, or if, instead, they will tell them that this is not worth anything and that the only valid instruction is that which is taught in the schools for the whites? We hope that you, who are coming from the government of Columbia and from the government of The Netherlands, can give us an answer".

It is to be regretted that neither this view, nor other similar ones, were collected or taken into account by the decision making agencies, and that history, once more, has given a negative answer to the demands and desires of the Indian communities. As was finally stated by another Indian leader, inspector of the Acaricuara community, on receiving the printed result of their work in the project: "We expected that you would stay with us for at least two or three more years, till we would be prepared to devise our own educational materials and contents, in short, to take our education in our own hands".

Note

1. Luis Alberto Alfonso et al., *Educación, participación e identidad cultural, una experiencia educativa con las comunidades indígenas del Nordeste Amazónico*. CESO Paperback No. 3. Imprenta de Juan Pablos S.A., México, 1987.

14.

Theatre as a Communication Medium in Community Development

Eberhard Chambulikazi

This article argues that popular theatre is communication in a confined sense. It has particular features which are woven around the human factor, and which are often lacking in other media. The basic elements of this form of communication and development are aesthetics, conscientization, dialogue and participation. The whole process of performance reveals these essential features. Popular theatre creates a horizontal type of communication which opposes the classical top-down channel.

The article discusses these special features of popular theatre in the light of the concept of development theories/practices that have so far been experimented with in the Third World. The case study is on Tanzania.

The aim of this article is to initiate a discussion on the need to adopt a cultural form of communication in order to provide an amenable atmosphere for development processes. Behind this objective lies the fact that for the past four decades or so, Africa has seen little real development. It has seen the growth of an atmosphere that led to less development. Whereas there are many explanations for this condition, it is the objective of this paper to deal with the process of communication in drama.

The article will discuss one example of theatre as a means of communication for development.[1] It does not seek to substitute the whole communication system. It is neither feasible nor desirable. Africa is not insulated from the rest of the world. This article seeks to expand the concept of communication, especially in Africa, among the rural areas and the urban poor, with whom - perhaps because they form the majority - impersonal media such as radio and newspapers, in time have proved to be quite insufficient. The concept of mass communication needs a subjective factor in order to involve these people in their own development.

Theatre and communication

Eminent scholars of communication never mention theatre as a form of communication in their discourse.[2] The current concept of communication disregards popular theatre[3] as a form of mass communication[4]. Instead, it assumes technology to be a necessary part of communication, quite oblivious to the fact that there are other societies that have cohered and prospered within certain limits without the employment of technological forms of communication.

Development planners wanted the rural dwellers to change. In this pursuit, they committed an act of great contradiction. They denied them the use of their own forms of communications. Instead, they brought to them their own forms of communication which were technological: press, radio and electronics. They seemed to be unaware that the villagers could neither read, write nor afford a radio. The rural people do not think in terms of telephones or television-sets: these were far from their terms of reference.

Press, radio and television are a one-way channel between the official and the people. It is the upper echelons that decide what is good for the people, very often disregarding the priorities of particular locations. Picking from the tradition of using performances to criticise leadership, popular theatre can create a bottom-up channel of communication which can expand people's participation in development.

Also, popular theatre is a crowd-puller. By the fact that it brings together different people who, animated by a good and provocative piece of dance, dialogue or song, will join in at different levels of participation, it encourages horizontal communication.

There are several assumptions behind the need for this discussion of popular theatre as a alternative form of communication. These are:

1. The historical basis of technological communication, which in the West was the Industrial Revolution, and its subsequent domination over developing countries in international trade and finance, is absent in Tanzania.
2. Hindrances to implementing (technological) communication in Africa, such as illiteracy, ethnicity, languages (some for which no alphabet exist as yet), a lack of foreign exchange to import newsprint or spare parts, poor income distribution, people's attitude towards the government, religion, geographical diversities, impassable roads, and many, many others.
3. The survival and revival of popular theatre as a mass-communication medium is in part the result of the dismal functioning of technological mass communication which has failed to inspire and involve people in development programmes.

Popular theatre and communication

The notion of using popular theatre for development and social change is not entirely new in Tanzania. Traditional theatre was linked to social issues. It was pedagogical. It communicated topical issues and even initiated political discussion. Conversely, some theatre was used against the interest of villagers by dominant groups. In a later period, colonial governments used theatre for information purposes. In Ghana, after World War II, the colonial government mounted health campaigns. Drama is said to have been highly successful. "It was the most truly Ghanaian audio-visual aid, depending as it does upon a nationwide aptitude and by its relation to local customs and traditions". Ross Kidd argues that colonial governments have searched for ways to "supplement the mass media which had been shown to be incapable of effecting change without intermediary processes" (Kidd 1979: 3-9).

In Tanzania there have been three major workshops/projects that dealt with popular theatre and communication for development: The Malya Theatre for Social Development, 'Warsha ya Sanaa Za Maonyesho Kwa Maendeleo ya Jamii'[5] and the Msoga Popular Theatre Workshop. The Malya experience was a three years' project and could therefore offer more insight into the process and evaluation of popular theatre over a period of time. Indeed, there were tangible results. A year after the village core group on popular theatre had started, the youth were given about eight hectares of land on which they could cultivate their own crops. They planned maize, cotton and ground-nuts. Two years after the project had begun, the village core group, having shown considerable value, had OXFAM, the funding agency, consider them for more aid in the form of a plough and some oxen in order to improve the yield. The most important aspects for the purposes of this paper is the progress in which these things came about. They were the result of participation and asking the youth to decide what they wanted, instead of the local government imposing its will on an unwilling population.

The three days' Bagamoyo workshop was based on the format of earlier workshops such as Laedza Batanani, Chalimbana and Murewa.[6] The report admits that the workshop was not a big success although the experience was worthwhile. The reasons appear to lie in the approach rather than in the effect of popular theatre in general. Bagamoyo is a very ancient town that lies sleeping on the Indian Ocean. It used to be the capital of the coast and notorious for its slave trade, serving as the exit port for slaves destined for the Indian Ocean and the Arabian peninsular. Once more important than the capital Dar es Salaam, Bagamoyo, with a population of about

30,000, is simply its neglected backyard.

The approach used for this theatre workshop was the one used in the villages and rural areas, where it had proved to be useful. In Bagamoyo, where the people have urban attitudes and individualistic tendencies, the approach hit the rocks. Businessmen were suspicious of it and those who owned cultural groups restrained artists from participating. They thought it was the government that was behind this. At the time the relationship between government and businessmen was poor. The workshop actually failed in its stated objectives of involving people in analyzing their own problems and deciding on actual steps for their improvements. On the other hand, this workshop did point to the necessity of devising methods that are appropriate for townships.

Case study: the Msoga Popular Theatre Workshop

Msoga village is in the Bagamoyo district. Five years previously, a project called Jipemoyo, carried out in the same area, had been concluded by Tanzania and Finland.[7] This project studied culture as a motivational element in development or as an impediment to it. So the 1985 workshop, in which the present author was involved grafted itself on this five-year-old experiment as a quest for a process that would disprove the view of classical paradigms of communication and development, which viewed culture as an impediment to development. The workshop took only one element in culture to work with: theatre.

Needless to say, there were other collateral objectives besides seeking an effective process of communication. Here was Msoga village. Her valiant people had fought hard against a government decree that had ordered them to move their village, which is well endowed with water and green vegetation, to a patch of miserable land uphill simply because it was near the road. This happened in 1976 when resettlement was the political vogue in Tanzania. But now, even with such an illustrious history, the population had dwindled from about 1,200 to only 600 in less than a decade. Production was low and apathy was abundant.

So we wanted this workshop to not only prove the efficacy of an alternative communication system, but also to contribute directly to a social situation as part of a search for a solution to the demographic, political and social problems. The village already had three theatre groups but these mostly sang about the praises of political leaders in the country. And, we thought, leaders had enough songs of praise. It was high time for the groups to go beyond singing or performing simply plays on village moral issues, which are important too, but need a broader perspective.

The quest for an efficient process was necessitated by critical remarks rising from previous workshops in Southern Africa. It appeared to the organizers that there was a major weakness in the way popular theatre workshops had been run. This flaw was the inability of the workshops to form a firm link between aesthetics, ideology and the political nature of rural communities. The Bagamoyo case was one such example. The workshops had not provided a type of popular theatre which is a vehicle for serious criticism intertwined with aesthetic and human elements. There was enthusiasm for using art for development, but there was great demand for the study of the dynamics of these art-forms. This demand had often resulted, in the experts/politicians bending village art-forms to the extend that they alienated the rural population. It is senseless, for instance, to do an initiation dance which has a lot of hip movement, and what one could call a symbolic appeal to procreation,[8] while singing about apartheid or how to combat theft.

Experts jumped on drama to communicate with the villagers while overlooking the wealth of village artistry. Drama as we know it today from books written by western experts, is a product of the history of the West. Africa cannot automatically take western drama into the villages and make it a popular art-form. It has its limitations. To take one example: whereas in western drama there is a protagonist and antagonist, and the audience are only involved as spectators, African drama has principal characters locked in a form of conflict whose resolution depends on the participation of the audience.[9] The audience sing along with the characters, comment, ask questions, and so promote dramatic action. Drama is not a written tradition in Africa. It is a performing art.

So to bring western drama uncritically into the village was to introduce something new, which may be exciting, but it was suspected that it would surprise rather than communicate, in the manner of TV programmes being seen for the first time ever in a far-out village in Tanzania. It was suspected that it would alienate rather than involve. Drama that depended on dialogue and action was out of place in a local culture where theatre is spiced with songs, dances, puns, proverbs, mime, audience participation etc.

Equally serious is the way some dances were treated. Dance resource persons went into the village, dismembered local dances and re-choreographed new dances from these local ones, without regard to the feelings of the villagers, or wondering whether this was the best way to communicate. This is what is meant by the lack of a serious link between aesthetics and ideology and the political nature of the rural communities.

The Msoga workshop was designed to affect little of the traditional dances. We wanted to try to use the dances and songs as the villagers themselves would. The villagers were, in a way, to be the resource persons with respect to the type of dances and songs that we were going to use. We were going to be catalysts only in relating the content to a wider experience. If we were going to add new artistic experience we would have to consult them first. This approach would avoid the risk of being looked upon as the people who were encroaching into their lives, and the 'experts' who claimed they knew everything about their culture and what they needed.

The process

Almost all workshops in Southern Africa have taken the following format, which was based on the Botswana 'Laedza Batanani'. The length of each item varied according to local circumstances, but the general outline was maintained. The Msoga workshop was no exception.

a. Meeting village participants and laying the basis of working together;
b. participatory data collection;
c. analysis;
d. creation of fable and rehearsals;
e. public performances;
f. post performance and follow-up.

(a) Meeting the villagers

In the Msoga workshop, this meeting took various forms. We met to agree on the timetable programme, participation, food and accommodation etc. But we also met to dance together. Dance was the main local form of performance. This way we learned the vocabulary of local communication. We learned about the structure of the dances.

(b) Participatory research in data collection

The process of data collection was organized so as to achieve maximal involvement of the villagers. Each group was assigned two guest participants who would act as resource persons guiding the process. Thus, in groups of several people, we visited the village homesteads. We talked to people. We explained to them the nature of our work, that we were there to use theatre to discuss village issues, and that we could not promise any solutions. That it was up to them to solve things. At the end of the day we came up with a list of several problems. Only a few will be listed here.

1. Agriculture: The people complained that having three different kinds of farms (Ujamaa, block and personal farms), which were scattered over the area, left them too little time to pay attention to all these. Also, they needed fertilisers and a lorry. They said that prices of agricultural goods were too low, and marketing facilities were absent.
2. Education: They had insufficient teaching material. The classrooms were decrepit. There were frequent premarital pregnancies.
3. Health: Better management was required for the maternity and child-care clinic. There was not enough medicine, so women resorted to herbs. The staff who managed the ill-equipped dispensary of the village were rude. There were plenty of malaria, hookworm and tapeworm cases.
4. Water: Water was dirty. They wanted another source of water because the stream down in the valley was also salty. They could not boil the water for drinking without concentrating the salts in it.
5. Development: They said that the government was not serious on the needs of the village. They gave an example of a small clinic whose funds were provided by UNICEF. However, it had taken eight years to build it. And even then, the toilet and other things were not ready.
6. The village leadership was old and inefficient. It required to be replaced.

(c) Analysis

After the problems had been listed, there was a public discussion in the village square where hundreds of people attended. In the end three subjects seemed to involve people. These were health, agriculture and education. So these were given more attention. The analysis referred to here is not the type one finds in a university situation. It was a village level analysis, raising the people's understanding of the problems and a quest for solutions. The guest participants brought with them broader connections and relationships to the national or international levels.

1. Agriculture: The village leadership was outspoken about the need for a tractor. The villagers agreed and expanded on this. The village needed a tractor because it could dig deep and get the weeds out. Normal hand-held hoes were inadequate. There was a remarkable unanimity on the need to cut down the three types of farms required by the government. This would raise productivity.
2. Health: The villagers wanted to know why it had taken eight years to complete a small clinic. They claimed that there had been thefts of building materials at the district level to which the building of the clinic had been entrusted. As a result, they continued, pregnant women had to

walk great distances to the other clinic.

On the issue of water, a fierce discussion grew and forced the participants to walk over to the stream to see what the situation was like. A small dam had been built by the colonial government back in 1955, but since then it had been accumulating dirt. It had never been scoured. Today the salinity was high. Some thought that a place for cows to drink should be separate from where the people drew water for domestic use. Some thought the dam should be broken down so that the dirt could flow. Others said this would deplete the only source of water, and the stream would become a small rivulet that would not satisfy all their needs.

We saw very few latrines. But people avoided a discussion on this issue. It could be that a public discussion was embarrassing, and that a more discrete method would prove better. Nevertheless the villagers complained of dysentery, which might be linked to the lack of latrines. The use of bushes on the land sloping down towards the stream only meant that when rains came they flushed all the dirt into the only source of drinking water.

3. Education: There was a strong feeling that it was the teachers who should be blamed for the pregnancies in schools. Teachers argued back by saying that it was the responsibility of the community to show examples to their children. They said that parents behaved in a manner that encouraged the children to become pregnant. Others thought that old morals could not work in a modern world. They referred to the phenomenon of girls' initiation which, in former times, was done just before girls were married, in order to educate them on marriage responsibilities. Today, they lamented, children spent their time at school and could not get initiated. If they did, it took a long time before they got married. The whole life pattern was changed. Others thought that the educational system was wrong. If the prospects of going to secondary school were dim for certain students, primary school was a waste of time.

(d) Fable creation and rehearsals

The groups went to their respective areas to rehearse after they had created a fable as a base for dances, songs, dramatic skits etc. At the end of the process, groups came up with the following themes:

- the Bigilio group had made a theatrical piece on pregnancies;
- the Chicalia group had made pieces on village financial accounts and on health problems;

- the Mkwajungoma group had made a dance and skit on development tax.

It was emphasized that in order to ensure the continuity of this type of communication and the required skills, the villagers should take leading roles in the creation of song and dance. The techniques should be within the limits of the village skills basically. The artistic vocabulary should remain untouched, and the conception of what was beautiful should be for the people to decide. Any changes should be sanctioned and grasped by them.

Rehearsals were open to all participants in the workshops, any observers and passers-by. There were stimulating discussions at the rehearsal stage. People debated the artistic decisions of the workshop participants and also debated the basic reality on which the play was based. In the Mkwajungoma group, for instance, on the issue of tax for development (a recently introduced decision by the government to raise revenues for local governments), villagers discredited the one-sided decision of the state which had not involved them. They thought they should have been consulted. Others thought that only men should pay; still others thought that it should be studied carefully, and that payment should depend on the wealth and conditions of citizens. Such debates, which took place in all three groups, were an extension of the process of understanding reality by participating in horizontal discussion.

(e) Performance

The performances which were held in the village square were well attended. Although meant for the village of Msoga, the performances even managed to attract representatives of a tribe with which the Msoga people were at odds.

During the performances, the public comments kept flying onto the performing area, which is the common style of watching plays. Involvement is intense and direct. If an actor does something stupid, he is told there and then. If his enemies are stalking him, the spectators will tell him to be careful. A performance is never the monopoly of professionals. It is a common good, an exchange of ideas. For students of communication through culture this feature has singular significance. The instantaneous comments, as the dance or skit are going on, are genuine communication. Good communicators take advantage of this and make the play respond to this type of exchange. While conducting the post-performance discussions, we failed to elicit a similar force of comment and diversity of ideas. For the audience, this process did not need to be repeated.

1. Bigilio Group: The leading song was composed first, forming the basis for a play to be created afterwards. The song was composed by Zaulole, the choreographer of the group. A rough translation of the song goes as follows:

    Children of today are quite naughty.
    They leave home, I believe they've gone to school,
    In truth they have boarded a minibus
    I have a letter from the party, CCM[10]
    It says my daughter is pregnant.
    I ask my daughter, she tells me to get lost, 'Leave me alone'.
    I take my daughter to the CCM
    When I get there, CCM ask her who made her pregnant,
    She tells them it was some cool breeze...
    'I do not agree, I will sue the parent.'
    CCM goes to court.
    When she learns about the court, she gets afraid,
    She mentions Mgweno.
    I ask Mgweno about it. He denies he is responsible.
    The parent is sad. 'Mr. Magistrate give me an injunction,
    I will take Mgweno to court, he has ruined my daughter's life'
    Asha and Mgweno, both of you will go to prison.
    For the act you have committed together.

    The skit: Dancers in the square do the *bigilio* dance, a movement that requires highly efficient footwork and rhythmic variations of skipping and adding beats. The dance flows like a whirlwind or like a cloud on a windy day. They are dressed in *khangas*,[11] and their hair is adorned with flowers and plaited in some local style.

- The dance stops. Mother and Asha, who is obviously pregnant, appear in court.
- Mgweno is summoned to court. A policeman brings him in.
- Interrogation.
- Mgweno is sentenced to five years in jail. As the mother breaks down crying, other women comfort her. Meanwhile the last song is sung.

2. The Chizalia Group: The group had two plays. For the sake of brevity, we shall describe one that had the greater impact and dealt with an issue that affected them a lot. George, the son of the village black smith, composed the song, and others edited it. Here follows a rough translation:

We, Msoga villagers have many complaints
About the accounts of the village finances.
They keep postponing, tomorrow and the day after tomorrow,
We want the account now. Why are we not given our accounts now?
This is the fourth year, we have never seen the accounts.
Even village work does not make much sense.
Guests, please note our situation.
We of Msoga are fed up with lies and politics
Msoga village government, give us the accounts now.

The skit:

- The villagers are tilling their land. Money flows into the village coffers.
- Villagers demand the accounts at a public rally. The chairman of the village postpones. He promises to show the accounts by September.
- September comes and the chairman tries to postpone again.
- The village song is sung again, and the chairman leaves shamefacedly.

The performance was followed by discussions on the plays, the information and the strategy afterwards; how to actually solve some of the issues. A hot debate flared up as the village leadership tried to wriggle out of the issue. The people wanted them to produce the accounts and they gave them a deadline. Medical assistants working in the small village dispensary were told to be more human and tolerant, and to treat mothers better. The issue of the tractor was overshadowed by the accounts. Villagers now argued that if the tractor came and there was higher production, the problem of the theft of village accounts would be compounded. They wanted the accounts issue settled first.

An interesting element here was the manner of deciding. People discussed things. They tried to understand the problems step by step. The village accounts issue, which had not been made public, was brought to the fore and the leaders had to conform to the wishes of the villagers. The process of dialogue proved to be an educational experience. This process was similar to the one used by the Mkawajunoma group.

Analysis

It has been pointed out earlier that theatre has never been defined as a mass medium with its special dynamics. Of course theatre in general is communication. Communication can be said to be the mechanism through which human relations exist and develop. However, at this general level, all manner of things can be forms of communication; from a telephone to a garbage dump which reveals to the neighbours the character of the owner.

Judging by the Msoga workshop, and generally by all other popular theatre workshops, theatre as a mean of communication is marked, apart from its inherent entertainment value, by its conscientizing role. It is educational. Popular theatre does not claim to be a neutral medium of communication such as is claimed of computers, printed media etc. The human factor in popular theatre causes it to identify with one or the other. Popular theatre, in its aesthetic mediation, has a bias towards development or simply creating social awareness, which is an important step in the development process. In repeatedly confronting the issues, from the common participatory research to the analysis, fable creation, performance and discussion, the spectators attempt to grasp a method of seeing reality, of not accepting things as they are shown. They peel the outer layers that cover the problem.

The example of the tractor is relevant here. One might say that a tractor is necessary for agriculture. But after a serious discussion the problem was found not to be in agriculture, but in the proceeds from agriculture. The awareness-raising factor here is embodied in the manner of grasping the truth, of not accepting whatever is stated.

Another feature that marks off popular theatre as a medium in its own right is dialogue. Viewed from the classical theories of communication, dialogue would be headed under interpersonal communication. Communication scientists have preferred the non-controversial, non-ideological concept of interpersonal communication, while educationists such as Ross Kidd have preferred the ideological Freirian concept of dialogue. Interpersonal communication depends on mutual attraction among individuals, a difference in status and interdependence, propinquity and size. This view expands Lerner's view that information flows from those with more authority to those with less. Dialogue, however, has a different requirement. In dialogue all are learners in a situation. They share experience. Dialogue gives a change to everybody to conceive reality from the others' point of view. Rural dwellers are not empty-headed buffoons to whom development stimuli are sent and who respond in compliance. The rural community's silence and scepticism are only conditioned. It is dialogue that gives them a change to peel reality, from their point of view.

Theatre is not interpersonal communication, as some African communication scientists have argued. Theatre is a four-fold phenomenon of aesthetics, participation, dialogue and conscientization. Interpersonal communication is an almost empty, neutral channel. Dialogue is a vital ideological process of exchange of information and collectively shaping an outlook. Interpersonal communication in popular theatre is, then, a far richer concept in a political sense than it is at the level of the diffusion of innovation.

By depending on the image rather than on the written word, popular theatre has removed communication from a linear concept of literacy as the sole and only way to development. Literacy is certainly fundamental, but is not the only way. In some parts of the Third World, images deserve the priority. The use of images takes the rural dweller straight to a grasp of reality, without having to wait for months until he can read or write.

The image is the central point in theatre as a form of communication. If it were not for the image, theatre would remain at the level of dialogue. The image, or in a more technical fashion, aesthetics in popular theatre, is functional. It is not independent, with a merely entertaining role. It educates, it informs, it instructs. Here of course we come to the strength and weakness of this form of communication. Whereas participation, dialogue and conscientization can be applied anywhere, aesthetics are highly specific. They are non-transferable without causing harm. A dance in Njombe, South Tanzania, cannot simply be taken to Tanga in North-East Tanzania. In spite of the national efforts to forge national unity by bringing different dances to different people, essentially, and for a long time to come, those who wish to communicate by using theatre will have to localize aesthetics. This means learning a new language of communication every time.

As seen in the Msoga workshop, the mode of cultural communication rejects a linear conception. The boundary between the actors and the spectators is constantly fluctuating. There may be a small core of expert dancers, but the majority are not refused the right to join in. And this participation reflects an intertwining of ideas, a sharing of common heritage. It is a collective experience. Popular theatre is a focal point where participants share ideas and communicate. The flow of cultural communication goes backwards and forwards, at once seeking a response and sending one. The process is not linear but concentric.

Conclusion

There are many limitations to popular theatre used as a mean of communication in development. More research is required. Some communication scientists have even thought that popular theatre as a mass medium is a figment of the imagination; a mere anecdote.[12] But for us who have worked in the field, this is not so. Villagers communicate, instruct and inform each other in fine movements and tunes. The experience is both physical and spiritual. What we need is more research and critical reconsideration in order to use culture effectively in development.

Notes

1. Development in this study refers to a "positive socio-economic change in the quality and level of human existence which is aimed at raising the standards of liven and quality of human dignity" (Kidd & Colleta 1981). Development is a holistic concept. It is at one and the same time material and spiritual, and can not be confined to mensuration in purely quantitative terms.
2. Texts referred to include Schramm & Lerner (1976), Pye (1963) and Lerner (1958).
3. Popular in this study refers not to the symptoms which indicate popularity such as merely coming together or people and collective celebration. Here it refers to the conditions, material or spiritual which make people come together, and the slant of these reasons must be directed in their interests first. For instance if people come together to sing the glories of their oppressor, however beautiful the scene, it is not popular. But if they sing about an adulterer who is disturbing the calm of the village, then it is popular.
   (See Kidd & Colleta 1981: Introduction).
4. Mass communication as used in this paper refers to an interlocking of two processes. First it refers to the flow of information and the circulation of ideas in human society. Simultaneously, it refers to the intended effect in which a complex process of secularisation and politisation of ideas takes place so that subjects of development can take up critically their place in the process of social transformation. Technology, therefore, is a historical phenomenon with a basis in certain societies and although it can accelerate the process of communication, any place, often with immense effects, it can not assume its practicability any place any time.
5. Bagamoyo Theatre for Social Development.
6. Laedza Batanani was the first popular theatre workshop in its modern form. Its architects are peasants of Botswana Eastern Region with Ross Kidd, Martin Byram and A. Kohler. For more information see F. Youngman, Laedza Batanani booklets; Adult Education Centre, University of Gabarone, Botswana. For the Chalimbana Workshop, see Stephen Chifunyise (1980). The Murewa Theatre for Development workshop was held in Zimbabwe in 1983. ITI and/or IATA could have more information because they co-sponsored the event.

7. For more information, contact Kemal Mustafa, Department of Sociology, P.O. Box 35042, Dar es Salaam University, Tanzania.
8. For a comprehensive argument, see Thomson (1946, pp.11-22).
9. This argument is in 'The Sense of Drama in Mukotani Rugyendo's The Constest' by Chambulikazi in UTAFITI, 1986.
10. CCM is the sole, ruling party of Tanzania.
11. A Khanga is a warm and colourful wrap-around garment for women, in East Africa mostly.
12. Mr.James Napoli, American University in Cairo. A comment on a paper on popular theatre.

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Section III

Education and Productive Life

15.
Education and Production

Antonio Cabral de Andrade

After making a distinction between Education for Production and Education-cum-Production the author reports on the findings and results obtained with programmes and projects aimed at Education -cum-Production in Latin America, the Caribbean and some African countries. Differences are observed between socialist and market economy countries with respect to the objectives, functionality and successes of these programmes. Controversial questions are tackled, such as the scope of the concept 'productive activity' and the link between productive activities on the one hand, and education and training on the other. Problems with regard to the introduction and implementation of Education-cum-Production projects are discussed related to different political environments, and a number of innovative experiments are presented, both from the formal as well as from the non-formal education sector.

The relationship between education and production can be approached in two ways:

1. Training people to perform better in their future working life, which means developing in them positive work attitudes, making them aware of labour environment, and teaching them how to produce more and better (Education for Production);
2. Taking advantage of the pedagogical potential of the production process to teach students not only how to produce, but also subjects of general knowledge (natural and social science, mathematics, etc.). In addition, combining education with production increases the volume of goods and services available, and raises funds to finance school activities and/or the family's budget (Education-cum-Production).

This article deals mainly with the second approach. The theme of Education for Production has been analyzed exhaustively, especially in connection with studies of Education and Employment.[1] Those studies are mostly concerned with educational and training requirements to meet the needs of a new occupational structure resulting from changes in technology and in the structure of production.

These attempts to forecast long-term manpower requirements and to convert them into education needs, even though they were carried out over the past two decades, have shown disappointing results and have now been almost completely abandoned. Instead of looking for a close equivalence between the level and type of education on the one hand, and the job on the other, specialists are now concerned with the general qualitative educational requirements caused by technological change. The main purpose now is to create in men a solid general knowledge which would enable them to adapt more easily to rapidly changing job contents and working conditions.

This situation contrasts sharply with the renewed and growing interest that the theme Education-cum-Production enjoys today, particularly in developed market economies. The reasons are different in each case. In developed countries Education-cum-Production essentially aims at improving the 'employability' of youngsters and at easing the transition from school to work. Furthermore, it intends to develop the youngsters' social awareness, encouraging them to participate in 'socially useful' activities.

In developing market economies, priority is given to Education-cum-Production mainly because of two economic reasons. First of all, income generated through the sale of goods and services produced by students can help to finance schools and training centres. This is of great importance at present, due to a shortage of public funds. Secondly, in programmes whose target groups are poor people, income from production can be distributed among them. School, therefore, becomes more attractive for poor students who do not need to work outside anymore to get some income.

In socialist economies, Education-cum-Production continues to be an essential instrument in their efforts to create 'a new man' and 'a new society'. However, there are some indications of changes in contents and processes in such programmes. One of them is the decrease in importance of 'manual work', which is gradually being replaced by activities aimed at scientific and technological development. The second one relates, more than previously, to a major concern: the pedagogical dimensions of the productive process. This means that the selection of goods and services to be produced at school mainly takes into account the interest of production for the educational process. Repetitive and monotonous activities are gradually being replaced by those which stimulate creativity and contribute more to learning.

It is interesting to see how educationists react to the proposals on Education-cum-Production. Those concerned about the risk of 'changing school into factory', insist on giving more value to the pedagogical aspects of work, even if there are negative effects on the economic output. Others try to broaden the concept of 'productive work', including aspects other than specific 'manual activities'. A third group is more concerned with developing in students 'social awareness', with 'productive work' only as a motivating element.

Justification and objectives

As a general rule Education-cum-Production projects and experiments are justified by pedagogical, economic and social considerations. The emphasis lies on one or another of these considerations depending on the case. Among the pedagogical considerations, the following may be mentioned:

1. Ensuring a balanced development of the physical, emotional and mental attitudes of all persons and of their moral and aesthetic values, in their own interest and that of society (UNESCO, IBE, Recommendation No. 87);
2. Teaching students to recognize the economic and social values of the various types of work by inculcating in them, through education, a respect for workers and for the world of labour in general, and by developing at the same time their ability to choose freely and more adequately the field of their studies, work and career (UNESCO, IBE, Recommendations No. 87);
3. Improving the integration of theory and practice through a better understanding of the principles and scientific processes implied in the various types of work[2];
4. Developing certain traits of character in the students, such as perseverance, creativity, uprightness, self-determination, and habits of discipline and positive motivation at work[3];
5. Attracting students to the educational institutions by enhancing the efficacy of the programme of general education[4], and by endeavouring to make an impact on the local environment by means of community activities in support of apprenticeship;
6. Facilitating the integration of the various educational disciplines and subjects for the purpose of dealing with problems at work and in life generally[5];
7. Establishing new relationships between teachers and students and also between teachers and workers, thus strengthening the connection

between the world of education and the world of labour.[6]

The principal economic considerations are:

1. Creating additional resources for the financing of education and training, through the sale of goods and services produced by the students:
2. Creating income for poor students and their families by reducing the 'opportunity cost' for the participants who decide to go to school instead of work;
3. Endowing the students with knowledge and qualifications and teaching them to developed habits that will enable them to raise their productivity at work. In this way, the systems of education and vocational training would perform the very important function of satisfying the demand of the productive system for human resources;
4. Increasing the employment opportunities for participants who graduate from the educational and vocational training establishment, thus shortening the period of transition between school and employment;
5. Developing productive activities in order to satisfy the needs of the communities, particularly those situated in the area of the school or training centre.

The social considerations in the socialist countries differ from those in the market economy countries. In the socialist countries, Education-cum-Production is part of the effort to create a 'new man', to build a 'new society' and to change the structure of production and labour relations. In the market economy countries the objectives of Education-cum-Production are much more modest; in their case the intention is to improve the relationship between the school and the community, to facilitate the transition from school to employment, to eliminate discrimination against manual work and to promote social mobility.

While in the case of the projects studied in Latin America and the Caribbean and in some African countries (Algeria, Angola, Ivory Cost) the validity of the pedagogical, economic and social considerations is invariably recognized as justifying the experiments, the weight attached to the various considerations is not uniform.

As regards experiments conducted in the context of the formal educational system, the pedagogical considerations are generally the dominant ones in the market economy countries. By contrast, in the socialist countries, for example Cuba, it is the social considerations that are given priority in projects of this kind.[7]

As regards experiments carried out at vocational training establishments, the more examples are of two types. Where the target groups of the projects are 'disadvantaged' persons, economic considerations are the main ones cited in support of such projects. However, in the case of programmes and projects, whose beneficiaries are persons from the middle or lower-middle class, prominence is given to pedagogical considerations and, to a lesser extent, to economic and social considerations.

Some controversial questions

At least four controversial questions were noted underlying the experiments proceeding in the various countries:

1. The scope of the concept of 'productive activity';
2. The principal beneficiaries or target groups of these projects;
3. The pedagogical connection between productive activities on the one hand and education and training activities on the other;
4. The purposes to which the goods and services produced and the income from the sale of products are to be applied.

(a) The scope of the concept of productive activity

Some use the concept of productive activities in a narrow sense that would exclude:

- Work carried out by students that is unconnected with the courses they attend at the school or centre;
- The internships that follow the regular periods of study;
- Practical activities the sole purpose of which is to demonstrate scientific and technological principles;
- Work performed by students in maintaining and repairing the school premises and the equipment during vacations or outside periods of instructions.

Others, however, take the concept of productive activities in a broad sense, stipulating as the only condition that the volume of the goods and services produced and the time devoted to them by the students is to be substantial.

Some specialists try to make a distinction between 'productive activities' and 'socially useful activities'. In my point of view this distinction does not make any sense: all socially useful activities should be considered as productive work.

(b) The beneficiaries or target groups

The situation in the socialist countries (e.g. Cuba) and 'mixed economy' countries (e.g. Nicaragua) differs from that in the market economy countries.

In the socialist and mixed economy countries, where the importance of productive work has been adopted as a principle of the organization of society, Educational-cum-Production applies to all students and at all levels of the system of education (the intensity varying in particular according to the age of students).

In other developing countries most of the experiments benefit the disadvantaged groups and are mostly carried out in the context of the non-formal education system or under the responsibility of vocational training institutions. The technical, agricultural and industrial colleges are the only important examples of Education-cum-Production in the context of formal education.

A further point to be noted is that the total number of persons participating in these programmes is very small compared to the number of those who ought to benefit from them.

(c) The connection between productive activities and education and training

The studies carried out revealed three types of situation. First, there is the situation where education and production proceed along parallel lines, without any communication or linkage between productive work and the disciplines of general education. This is what happens, for example, in the secondary schools in the rural districts of Cuba and in the 'salesian' vocational training schools which exist in most Latin-American and Caribbean countries. The implicit idea is that productive work is in itself an educational instrument, the link to the disciplines of general education not being indispensable.

A second situation is where production (type and volume) is established essentially in the light of the pedagogical objectives, the economic feasibility being given a low priority. This is the situation commonly found in the vocational training institutions linked to those Ministries of Labour or Education which receive substantial support from the private sector. Even the 'pedagogical enterprises' (hotel schools and the like) attach greater importance to the objective of training than to that of production.

The third situation is where production (type and volume) is established essentially in terms of economic objectives, the education activity taking the form merely of setting up programmes of vocational training for the production of goods and services. This situation is exemplified by the experiments carried out by institutions of the non-formal education system, vocational training bodies and community development agencies for the benefit of 'disadvantaged groups'.

(d) The purposes to which the goods and services produced and the income from the sale of products are to be applied

In the experiments studied, the ways in which goods, services and income are used can be classified into three types.

The first type is the situation where all the income belongs to the school or to the economic or administrative sector with which it is connected. This is what happens, for example, in Cuba, where schools produce in order to attain the target fixed in the National Development Plan and where the actual or planned income is part of the national budget. The same thing happens in the case of the programmes developed by institutions of the vocational training system, including the 'pedagogical or teaching enterprises', where the income is wholly integrated in the budget of the institutions in question.

A second type is the situation where all or most of the output - or the proceeds of the sale of goods and services - is applied for the benefit of the students and their families. This is standard practice in experiments intended to serve disadvantaged groups, whether the projects are conducted under the auspices of community development agencies or by vocational training bodies.[8]

The third type is exemplified by the situation where the proceeds of the sale of products are shared between the school or centre and the students.[9] This is common practice in the vocational schools at a level corresponding to primary education operated by religious groups (e.g. the 'salesian' schools) or by social welfare agencies, where most of the students or trainees are poor. This is also the practice in the agricultural colleges for technicians[10] and in some technical industrial colleges.

Problems

In the countries which have opted for a process of radical economic and social change (Cuba and Nicaragua) the major problems affecting the introduction of the experiments arose mainly in the early years. Once the political decision had been taken, the greatest difficulties were of a social nature: resistance by the parties concerned (students, parents, teachers, managerial staff of enterprises, etc.) due to the weight of tradition, to insufficient information about the proposed changes, and in general to the lack of adequate preparation for the change. In addition, the initiators had underestimated the difficulties involved with:

1. new physical and material requirements (premises, equipment);
2. the training and re-training of the teaching staff (including a profound change in their mentality in order to lead to a re-appraisal of the value of manual work and to the development of a relationship with the new clients of the schools - managers, supervisors and workers of the firms) and with the administration of the new system (in particular problems concerning the procurement of raw materials, quality control and sale of products).

In order to introduce, with little delay and on a massive scale, productive work in the schools, very simple activities were set up, repetitive and low-productive work, of dubious economic and social usefulness. These activities did not offer an incentive for the individual and social development of the students. In the market economy countries the difficulties are of another kind:

1. Hostility on the part of private entrepreneurs towards the 'unfair' competition of the output of the schools or centres;
2. Opposition of workers and union to a system which, in their opinion, diminishes the opportunities of truly productive employment and causes wages to go down;
3. At the family level, productive work at the school or centre is not always welcomed. Some parents consider that work tires the students out and that what matters is that the school should provide instruction in general knowledge and subjects such as reading, writing and arithmetic;
4. The (sometimes excessive) concern with production hampers the attainment of educational objectives. In order to produce high quality the instructors often take over the more difficult and delicate tasks of production, leaving the students to perform only the less challenging tasks;
5. Very often schools or centres experience administrative difficulties as regards the purchase of raw materials and retaining the earnings from the sale of the products;
6. It happens frequently that the principals and teachers of schools or centres in the formal educational system are opposed to the idea of the school's facilities and equipments being used by the community outside

school hours and during vacations. By contrast, this integration with the community is easier and more real in the case of programmes conducted by institutions of the non-formal educational system and by community development bodies;

7. It is difficult to organize the curriculum on the basis of production. In most of the experiments studied the curriculum is not worked out entirely on that basis;
8. In general, the reach of the experiments (in terms of the number of participants) is very limited. Moreover, owing to the lack of steady resources and to frequent political and administrative changes, particularly in the developing countries, several experiments are short-lived;
9. One important problem which hampers the experiments in the establishment of the formal educational system is the rigidity of these institutions. In the case of projects carried out by non-formal education or vocational training agencies there is sufficient flexibility to allow for changes and adjustments as the experiments proceed. But the fact that most of these agencies do not enjoy a high social prestige represents a serious obstacle.

Some innovative experiments

Among the projects and experiments being carried out in the context of the formal educational system a few cases deserve to be singled out for special mention:[11]

1. The agricultural colleges for technicians which are modelled on the 'farm school'. In some of these the students develop 'productive projects'. Part of the output is absorbed by the school and the balance is sold in the market, the proceeds of sale being paid to the school co-operative or directly to the students. Schools of this type exist in most of the countries of Latin America and the Caribbean, but the prominence given to productive activities varies greatly from one case to another.

   The problems which arise most frequently in schools of this type are:
   - Their operating costs are too high, because most of the students are boarders and these schools do not make full use of their productive capacity even though land and, very often, also equipment are available;
   - Generally, insufficient emphasis is given to productive activities. Between 20 and 30 per cent of the actual time of the students is spent on production, whereas the figure to aim for is 40 to 50 percent;

- While the choice of products is in keeping with the needs of the schools, it does not always correspond to the market demand;
- Most of the output consists of agricultural products, agro-industrial products are less frequent;
- In some cases (notably in Brazil) a number of the students attending such schools are not of rural origin or are not interested in working in a rural area on completion of their studies;

2. The secondary schools in rural districts (Cuba) carry out an important Education-cum-Production activity.

   There are about 400 such schools; their students are boarders and half their time is spent on production. The productive activity of these schools is of great economic importance, but they suffer from an insufficient integration of productive work with the subjects of general education.

   The productive work does not aim at professionalization. Students work in agriculture even though they may not necessarily become workers, technicians or professionals in the agricultural sector in the future.

   These schools produce a large number of agricultural goods and make an important contribution to the agricultural output of the country.

3. The National Pioneer Centre at Havana (Cuba) operates as a major vocational counselling centre.

   About 32,000 students attend at the Centre every week, equivalent to about 40 percent of the total number of pupils in fifth to ninth grade (age groups 10 to 14); each student participates in a three-hour programme of activities per week. The National Pioneer Centre is organized on the basis of 17 broad fields of activities[12] and 234 specialities. For each speciality there is a production unit operating under conditions very close to those prevailing in actual enterprises: a small hotel, a restaurant, a radio and television studio, a data processing centre, a sugar production plant, units manufacturing other products based on sugar cane, a farm, etc. As a rule, each student spends six months on each speciality, which means that in the course of the total (four-year) period of attendance at the National Centre, he can make contact with and work on eight specialities.

   Each production unit receives materials (equipment, raw materials) and technical assistance from the Ministry or service concerned (altogether 23 state agencies provide direct support for the 234 specialities). It seems[13] that the National Pioneer Centre has contributed to:

- A more conscious choice of the line of studies to be pursued in the educational system, and, later on, of the kind of occupation or profession taken up by students;
- A reduction of losses due to cases of drop-outs, change of career, etc.;
- Easier adjustment to working conditions later on.

Among experiments operating under the auspices of non-formal education or vocational training institutions there are some which have achieved considerable success. Others, although less successful, represent innovative ideas which could be taken advantage of in future projects:

1. In the Public Training-cum-Production Workshop in Costa Ria[14], the trainees (youngsters and adults) are taught how to make articles they need for their own use for selling in the market. The trainees provide the raw material and the finished product belongs to them.

   Each trainee chooses his own timetable according to his possibilities and the availability of equipment and instructors. These workshops also admit adults who already know how to produce, but need to use more expensive or more sophisticated machines available only in the workshops.

   On completion of the training period the trainees are encouraged to form co-operatives, partnership or mini-businesses for developing productive activities.

   The greatest advantages of this experiment are its flexibility on the one hand, and a high motivation for learning on the other. The main problems are linked with people who attend the workshop only to produce, without needing to be trained. They utilise, on a permanent basis, part of the workshop's capacity, preventing other potential trainees from having access to training. This experiment was less successful in its attempt at creating co-operatives, partnerships and mini-businesses.

2. The Pedagogical (Teaching) Enterprises (hotel and catering schools, beauty parlour schools etc.) operated by vocational training institutions. Such enterprises exist in most of the Latin American countries, such as Brazil, Uruguay and Colombia (they probably also exist in other regions). The trainees undertake a period of internship in these enterprises, which offer their services to the general public. The proceeds from these services are paid to the vocational training

institutions to which the enterprise in question is attached.

As a general rule, the operating costs of these enterprises are very high and the earnings from the sale of services are insufficient compensation for the expenses incurred. It seems, however, that it is possible to improve productivity and to reduce the overhead costs by means of some changes in the system of management.

3. Training-cum-Production for 'do-it-yourself' construction, the leading example of which in Latin America is the experiment undertaken by INCE-Construction[15] in Venezuela. The participants receive training in the various branches of the building trade while at the same time building their own houses. It is interesting to note that other members of the family (wives, children) help in the construction. After completion of the do-it-yourself course, the ex-trainees are guided towards other work sites where they may be hired as wage earners.

   The most positive features of this experiment are the high degree of motivation among the workers (they build their own houses) and the low cost of building.

   The main difficulty is to ensure a future paid job to all people taking part in the building activities.

4. The Offices for Practical Works in Vocational Training (OTRAFORM)[16] in Algeria, which were created specifically for aiding production activities in vocational training centres. They act as an intermediary between enterprises which demand products and the vocational training centres which provide them. They aim at identifying requirements from enterprises (particularly when the demand for products required is too large to be met by only one vocational centre), discussing and fixing prices and deadlines, distributing the total demand among the various centres, taking into account their production capacity, and providing them with raw materials. The most positive aspects of this experiment is that it takes advantage of an 'economy of scale' in gathering demand from many different sources, and production from many small suppliers. In addition, by ordering a great amount of raw materials, they can obtain better prices and reduce production costs.

   The main problem is that production and trading concerns very often tend to prevail over pedagogical interests. This leads to trainees having to work on repetitive and monotonous production lines, in which the pedagogical dimension is not usually very important. In other cases, the requirements of production do not meet the needs of the pedagogical progress of apprenticeship.

Main conclusions

In the light of the analyses and evaluation of the experiments now in progress or already completed, the following conclusions may be drawn:

1. Education-cum-Production is more functional in the case of the centrally planned economies, where it is applied at all levels of the educational system, covering all students and aiming to achieve very important objectives of social change. However, it can also be very useful in the market economy countries, though in their case the objectives would be less ambitious;

2. The key points for the purpose of achieving a result in an Education-cum-Production experiment would seem to be linked to the following factors:

- very active participation by the communities within the area of influence of the project;
- serious prior efforts to prepare the human resources (teachers, managerial staff for the school or centres and for the enterprises, supervisors, etc.) in particular as regards their attitude to their relations with the students and the community;
- special attention to the economic feasibility of the production and marketing schemes;
- greater integration of the productive activity with education and/or vocational training, while taking care that the economic objectives of production are not sacrificed;
- the initiation of a process of enhancing the awareness of the participants, including awareness as regards labour relations, the right of workers, systems of remunerations, the ways in which 'appropriation of the economic surplus' is effected, etc.;
- assistance for the setting-up of mini-business enterprises with the trainees who have participated in Education-cum-Production activities (particularly in the case of experiments carried out in formal education institutions);
- priority to be given to the use of the proceeds of the sale of products for the benefit of the students and their families, particularly in the case of projects designed for disadvantaged groups;

3. Encouragement should be given to establishing Education-cum-Production experiments both in formal education and in non-formal education and the vocational training system.

In the case of formal education the central problem is how to cope with the rigidity of the institutions concerned, especially as regards the recruitment and dismissal of human resources, the renewal of equipment, the procurement of the necessary materials, the sale of products, and the use of the proceeds. A further major difficulty is the lack of an effective relationship between the school or centre and the community, and the failure to give sufficient prominence, in the curriculum, to an awareness of labour problems.

In the case of non-formal education and vocational training, the most serious problem is that the institutions concerned enjoy little or no social prestige, for they are not regarded as adequate means of fostering social mobility. Accordingly, efforts should be made to enhance their social prestige by establishing communication with formal education and by endeavouring to obtain official recognition for the diplomas and certificates awarded.

Notes

1. In this case 'employment' means 'productive employment' or 'productive activities which create goods and services and generate income for those employed".
2. Oscar Corvalan and R. Andreani, *El trabajo productivo en la educacion formal y no formal: encuentro nacional.* Informe Preliminar, Chile, 1985.
3. Idem, ibidem.
4. "One of our claims is that work experience offers opportunities not just for vocational but for liberal education. Our work programmes are not simply the vocational arms of the institution. Learning about communications, inter-personal relations, organizational behaviour, problem solving and other objectives of general education is available in work experience". William R. Ramsay, Student work colleges, a service-learning philosophy and style. In: *Education with Production*, Vol. 6, No.1, September 1988.
5. Corvalan and Andreani, ibidem.
6. Idem, ibidem.
7. In the case of Africa, the present seems to be to put more emphasis on pedagogical considerations.

8. One example is the 'Public Training-cum-Production Workshops' project carried out by the National Institute of Apprenticeship in Costa Ria.
9. In some projects, teachers share part of the income with the students.
10. In some technical agricultural schools part of the income is paid to the school co-operative which provides a certain amount of financial support for the poor students (assistance towards the purchase of books, uniforms, equipment, etc.). In other cases, the income intended for the students is paid into a savings deposit account on which the trainees can draw on completion of their studies.
11. The information available refers only to Latin America and the Caribbean and to three African countries. We are sure that other interesting experiments are being carried out in other countries of Africa and Asia.
12. These fields are: (a) Transport (railways, road transport); (b) Aviation; (c) Sports; (d) Culture; (e) Agriculture; (f) Nature and Health; (g) Sugar Industry; (h) Tourism; (i) Business, Catering and Hotel Industry; (j) Radio and Television; (k) Communication; (l) Data Processing; (m) Food Industry; (n) Iron and Steel Industry and Mechanics; (o) Basic and Light Industries; (p) Home Affairs (fire brigades, traffic, minors, etc.); (q) Armed Forces.
13. There is no known systematic evaluation of the results of the Centre's activities.
14. There are 14 such workshops sponsored by the National Institute of Apprenticeship - INA.
15. INCE: National Institute of Educational Co-operation.
16. In French: Offices des Travaux d'Application de la Formation Professionnel.

16.

Educating for Self-Employment at the Primary School Level: Tanzanian Experience in the Post-Arusha Period

George A. Malekela

This article attempts to show in a historical perspective how education from the pre-colonial through the post-Arusha periods has been linked to productive life. Greater attention and length are given to the post-Arusha period (1967 to date) due to the Education for Self-Reliance (ESR) policy that emphasizes the need to integrate mental and productive work. Achievements and weaknesses of the policy implementation are shown. Recommendations for future action are made.

Education and productive work in the traditional setting

Education in different communities in the pre-colonial period was largely determined by the climatic, physical and biological environments, and by what was passed on to the succeeding generations by the predecessors. Its level of sophistication depended on the social, political and cultural development of the society concerned.

Many writers on indigenous education (see for example Culwick 1935; Furley and Watson 1978; Kenyatta 1968; Lawuo 1978; Moumouni 1968; Raum 1967) laud it for its intimate linkage with social life (both in a material and spiritual sense), its multiple character in terms of its goals and the means employed, and its gradual and progressive content, tailored to successive stages of physical, mental and emotional development of the child. The child was socialized in such a way that he could become a participating member of society. Emphasis was put on learning by doing. A child was taught by the parents, his brothers and sisters, relatives and the community as a whole at various stages of growth.

Education made a close link with the economy that supported the community. This could be farming, livestock, fishing, etc. Learning started by imitation. For example, boys while playing imitated building, herding and hunting, while girls imitated sweeping, carrying wood and water and cooking. During ritual ceremonies, such as initiation, each sex was taught the roles it was expected to play for the sustenance of society.

In each tribe some clans learned how to produce objects of both practical and cultural value. Crafts taught included pottery, basket making, weaving, tanning, iron work, building and stool making. Objects made were important in enhancing production, defense and cultural values of the people.

Equally, social values were taught as the child grew up. A child learned the importance of greeting manners, and ways of behaviour to different members of the family, the clan, and to visitors, as all occupied different positions and statuses.

In a few societies, such as those of the Bantu of the interlacustrine region and the Bena of the Rivers, which had reached a feudal stage of development, royal 'boarding schools' were established for training future chiefs and other leaders (Culwick 1935; Fallers, Kamoga and Musoke 1964). In these schools there were curricula, tutors, students and timetables that were pursued by all concerned.

Learning was also gained through dance, music, songs, riddles, proverbs and stories which contained various messages. These messages were on morals that taught self-control and control of others, besides providing entertainment. Religious education was part and parcel of the learning process.

Although there were no schools as we understand them today, societies did educate the young and they educated for productive life. Everyone learned knowledge, values, norms, attitudes and skills that were directly relevant to the society in which the child grew up. Indigenous education, therefore, tried to give relevant education that integrated theory with practice so that the individual would be at home in the environment in which he was brought up.

British colonial adaptations

Christian missionaries were the first to introduce Western schooling in Tanzania using the Roman alphabet. They were preceded by Arabs who built Koran schools that were attached to the mosques. Muslim education spread to the interior confining itself to trading posts such as Tabora and Kigoma.

The first Christian missionaries were Portuguese Franciscan Friars who served at Kilwa after its capture in 1505. They served as chaplains to the Portuguese garrison and probably to people nearby or slaves awaiting shipment across the seas. They vanished after 1729 following the Portuguese departure from East Africa.

These were followed by other missionaries in the second half of the 19th century. The missionaries were from different European countries both of Catholic and Protestant denominations. The main purpose of founding these schools was to promote proselytization. Generally the curriculum in these schools included academic work for prospective priests and teachers, industrial/technical courses and agricultural education to meet the manpower and economic demands of the missions (Cameron and Dodd 1970; Furley and Watson 1978). Those who passed successfully through mission schools were absorbed as teachers, semi-skilled craftsmen, farm labourers and sometimes as priests.

It should be noted that people benefiting from this early missionary education were very few and mainly drawn from the lower strata, such as ex-slaves and outcasts, since chiefs/rulers were suspicious of sending their own children or closest relatives because missionaries denounced traditional ways and beliefs and preached a new religion. The chiefs preferred other people's children to be the experimental group. By the time of the arrival of German colonialists around 1885, there were at least five mission societies working in various parts of the country.

During the German period (1885-1918), when East Africa (Tanganyika, Burundi and Ruanda) fell into the German sphere of influence following the Berlin Conference, both missionaries and the colonial administration established schools. The German colonial administration decided to establish its own schools rather than rely on missionary products whose outlook, loyalty and orientation (including language) could not be gauged because the missionaries were of different nationalities. Moreover, state secular education systems were common in Germany and it was natural to extend the same to the colony. Furthermore, some high-ranking German officials thought the missions tried to keep their best pupils to serve as teachers and priests, leaving only the second-best students to become government subalterns (clerks, interpreters etc.). Others disapproved of the religious propaganda in mission education.

The German government system consisted of three main grades of schools: the elementary nursery schools lasting for three years under African teachers, central schools lasting three years under African and German teachers, and high schools lasting 5-6 years under African and German teachers. In all the three types of schools Kiswahili was the medium of instruction.

The German curriculum is reputed for including both an academic and a highly vocational content. The curriculum ensured productive activities, be they of an agricultural or industrial nature.

It should be noted that most of the educational work in the German period was done by the missionaries. Schools had un-coordinated syllabuses. Kiswahili was used as a medium of instruction in government and in Holy Ghost Fathers' schools, while vernaculars were used in the others.

After World War I, 95 percent of German East Africa (Tanganyika) was handed over to the British as a mandate territory by the League of Nations. The German educational system collapsed during the war and schools were closed. The British authorities and mission societies had to begin afresh to rebuild an educational system. Although initially the British were reluctant to work hand in hand with the missions, the Phelps-Stokes report of 1924 made the British under governor Cameron accept partnership with the missions.

The British wanted education for African children to be within the context of the African economy and culture. The advisory committee on native education in tropical African dependencies advised that "education should be adapted to the mentality, aptitudes, occupations and traditions of the various peoples, conserving as far as possible all sound and healthy elements in the fabric of their social life, adapting them were necessary to changed circumstances and progressive ideas, as an agent of natural growth and evolution" (quoted by Thompson 1968:15). This was accepted by the colonial government in 1925.

Accordingly, the British tried to open institutions that might implement this policy. We shall look at two examples. The first in the Malangali school in which Mumford, its headmaster from 1927 to 1932, experimented with some ideas. He patterned buildings on traditional houses (Sangu, Bena and Hehe); visiting tribal elders were invited to give instruction in history, manners, traditions, and tribal law; while physical recreation incorporated spear throwing, dancing and football. The experiment, however, was met with missionary hostility on the grounds that tribal elders, induced to educating pupils in traditional ways, were inculcating pagan and non-Christian beliefs. Even the natives did not like it, as what Mumford was trying to impart could be learned at home. They wanted a western education (Morrison 1976:58).

The second example was the Tabora school, which started in 1925 to groom sons of chiefs for future leadership. Students were divided into tribes and each tribe selected its chief from among the students. Each tribe had its own dormitory and dinner table. There was a school court which tried offenses against school rules or tribal customs. The head chief acted as judge and other chiefs as councillors. This was in imitation of the local native courts. The curriculum was strongly environmentally biased. Agriculture, ploughing, forestry, and animal husbandry were taught. A commercial course for clerks was added later.

In spite of British efforts to stress the importance of an agricultural bias, the pupils showed greater concentration on literary subjects. All wanted a literary education that would lead them away from the land. They wanted certificates that would entitle them to paid employment in an urban setting where life was more comfortable and attractive than in rural areas.

As the number of African students increased and jobs in the modern sector dwindled, the British re-emphasized the importance of agriculture and vocational training, which was vehemently resisted by Africans, partly because it was racial as this was not included in European and Asian schools. Consequently, experiments in colonial Africa to institute the dignity of labour through a curriculum that had a strong agricultural bias failed. According to Morrison (1976:59) these experiments failed due to educational administrators having insufficient information and inadequate skills and equipment; many teachers, particularly Africans, were themselves escapees from rural life, and thus ineffective agents of programmes designed to persuade youths to work on the land. In addition, parents and pupils exerted strong pressure on teachers to concentrate on academic material on which examinations were based. The parents wanted academic education which would ensure their children of a paid job. Through the child's wealth, parents and relatives hoped to improve their personal living standards because according to extended family practices, a man should share his wealth with all members of the family, clan and, whenever possible, even with the tribe.

Primary education in the post-independence period (1961-66) and the primary school leaver crisis

At independence in 1961, Tanganyika was faced with an acute shortage of skilled manpower at the middle and higher levels. The central government concentrated on the expansion of secondary and higher education while the Local Education Authorities (LEA) were left with the responsibility of running primary education. Since the zeal and self-help efforts differed from one locality to another, some LEAs, especially those in the historically advantaged districts, built more schools and enroled more children than the plans allowed, while the disadvantaged ones failed even to make use of the funds that were set aside for expansion (Morrison 1976; Mutahaba 1974). Enrolment increases are shown in Table 1.

Table 1. *Percentage increase in primary school enrolment in aided schools in 1961 and 1966*

	1961	1966	% Increase
Standard I	121,386	154,512	27
Standard V	19,721	58,653	200
Standard VII	14,649	46,816	225
All standards	482,121	740,991	54

Source: Morrison (1976, p.113)

Why was there this expansion in the primary school cycle when the central government did not give it great emphasis? There are two major reasons to explain this phenomenon. Firstly, white collar jobs, which were mainly found in urban areas where living conditions were much better than in rural areas, required education/certification. Status, power, wealth and prestige were primarily determined by educational credentials. Secondly, the central government's efforts to expand secondary opportunities called for expansion in primary cycle enrolment.

However, by 1965 there were signs of unemployability and a lack of enrolment opportunities in the expanding secondary schools, as primary enrolments had outstripped secondary school expansion. The crisis was there and political leaders resorted to resolve it by exhortation and propaganda both to parents and pupils to ease the protests and tensions. Political leaders urged pupils and parents to develop love and respect for land and agriculture, the very policy pursued by the British colonialists to which the politicians and parents had been vehemently opposed in the 1950s (Furley and Watson 1978; Morrison 1976). The crisis was more keenly felt in areas with higher rates of enrolment like the Kilimanjaro region.

The government, the party (at that time the Tanganyika African National Union or TANU), and its affiliated organizations tried to solve the problem by starting communal farms, apprenticeship, workshops, etc. Parents and pupils, however, complained about the selection process as being unfair. The selection process was accused of nepotism, corruption and favouritism of children of those holding high positions in society. Furthermore, most of the parents were unwilling to take their children back to the land as they thought the educated children would be even more useless in agriculture than those who had never seen the inside of the classroom. Such parents accused the children who had failed to be selected of having wasted their resources (Dubbeldam 1970:120).

As job opportunities and secondary education vacancies started dwindling in the early 1960s, wealthy parents whose children failed to get places in Tanzanian schools began sending their children to private high-tuition institutions in Kenya and Uganda. The government tried to restrict primary education expansion without success. Although it was reluctant to countenance the establishment of private secondary schools, the government was compelled to give in to this social demand (see Table 2). The social demand for secondary education has led to the development of calculated transfers to less competitive regions, as selection to Form I is based on regional quota, repetitions (legal and illegal) and partly to the birth of Education for Self-Reliance.

The Arusha declaration and the birth of Education for Self-Reliance

The Arusha declaration was promulgated in February 1967. It intends to build an egalitarian society in which everyone works and there is no exploitation of man by man. ESR (Education for Self-Reliance) was designed after the Arusha declaration to give a guideline as to how the education system was best to implement the Arusha declaration. ESR places education in the forefront of building an egalitarian society. There is a call for the schools to inculcate the ideals of living and working together, of sharing equally whatever is produced, of a commitment to society, to discourage elitism and arrogance, to inculcate respect and dignity for manual labour, to integrate schools with communities, to involve students in democratically deciding on affairs which affect them, and to foster self-confidence.

There is also a call to see to it that each level of schooling is seen as an end in itself rather than as a springboard to the next. Each level, especially primary education, should be terminal and a preparation for life - in rural areas, where the majority of the people live and where the majority of the primary school leavers will have to live given the country's inability to provide mass secondary education. Primary education has to be a complete education in itself. It should not simply be a preparation for secondary school. Instead of being geared towards the cut-throat Primary School Leaving Examination (PSLE), which selects only a few (see Table 2), primary school activities must resemble what the communities around the schools do.

Table 2. *Primary school leavers and Form I selection 1961-1987*

	STD. VII/VIII	FORM	ONE	SELECTION	
Year	LEAVERS	Public	%	Private	%
1961	11,732	4,196	35.8		
1962	13,730	4,810	35.0		
1963	17,042	4,972	29.1		
1964	20,348	5,032	26.1		
1965	29,367	5,943	20.2	458	1.6
1966	41,083	6,377	15.5	2,329	5.7
1967	47,981	6,635	13.8	2,591	5.4
1968	58,872	6,989	11.9	2,610	4.4
1969	60,545	7,149	11.8	2,511	4.2
1970	64,630	7,350	11.4	3,021	4.7
1971	70,922	7,780	11.0	3,254	4.6
1972	87,777	7,956	9.1	3,667	4.2
1973	106,203	8,165	7.7	4,379	4.1
1974	119,350	8,472	7.1	4,964	4.2
1975	137,559	8,680	6.3	5,114	3.7
1976	156,114	8,659	5.5	5,756	3.7
1977	169,106	8,706	5.1	6,590	4.0
1978	185,293	8,720	4.7	7,165	3.9
1979	193,612	8,908	4.6	8,467	4.4
1980	212,446	8,913	4.2	6,677	3.1
1981	357,816	9,178	2.6	7,095	2.0
1982	419,829	9,241	2.2	7,988	1.9
1983	454,604	9,899	2.2	8,469	1.9
1984	649,560	10,077	1.6	9,606	1.5
1985	429,194	10,881	2.5	11,745	2.7
1986	380,096	11,721	3.1	12,625	3.3
1987	380,758	14,626	3.8	*	*

Source: Ministry of Education, Basic Education Statistics in Tanzania (BEST) 1980-1987. Dar es Salam, June 1988.
* Figures for private schools were not yet available.

The practice of productive activities as related to ESR 1967-1987

This ESR policy preoccupied the minds and work of the bureaucrats at the Ministry of Education headquarters and teachers in schools, as it posed a challenge. Its implementation, however, has been haphazard, characteristic of all other policies that have emanated from above since 1967.

Integration of theory and practice

All schools, primary, secondary and teacher training colleges, have ESR projects. The projects can be agricultural, featuring a canteen, co-operative shop, poultry, dairy cattle, piggery etc., depending on the environment in which the school is located. To date institutions hardly meet ten percent of their running costs (Temu and Komba 1987). At the primary school level Mosha (1988:24) has shown that on average each pupil produces goods and services worth Tshs. 6/= (US $0.15) after a year's work. This being so, he sees that the exercise is almost worthless and queries if it was not high time these activities were suspended and parents were asked to contribute this amount so that pupils could do more useful things.

Are there any efforts to integrate theory with practice so that the curriculum is relevant to the local needs and pupils acquire scientific knowledge and practice? Available evidence shows that there is absolutely no integration of classroom theory and practice in the production of goods and/or services and that they are ill-organized (Almasi 1985; Ishumi 1988; Komba 1981; Komba and Temu 1987; Mahai 1982; Nyerere 1977; Saunders and Vulliamy 1983). This is contrary to the expectations of ESR. "The farm work and products should be integrated into the school life; thus the properties of fertilizers can be explained in the science class, and their use and limitations experienced by the pupils as they see them in use. The possibilities of proper grazing practices, and of terracing and soil conservation methods can all be taught theoretically, at the same time they are put into practice; the students will then understand what they are doing and why, and will be able to analyze any failures and consider possibilities for greater improvement" (Nyerere 1967:18).

The ESR activities are known as extra-curricular, are non-examined and are often carried towards the end of the day when most of the students are tired. As such ESR projects fail to apply scientific knowledge or skills as theory and practice are divorced. This is so primarily because the productive activities are not valued in the provision of certificates. Those who excel academically are more rewarded than those doing well in productive work. Moreover, to date there are very few teachers in the school system who have had pre-service or in-service training in the integration of theory and practice of economic activities in a school setting. Due to this perhaps, both teachers and pupils are in a dilemma and are possibly doing their best to implement the policy in the absence of the requisite expertise.

Perhaps the gap might be filled by the Polytechnical Education Support Programme (PESP) initiated by the Tanga Integrated Rural Development Programme (TIRDEP) through German government support, whose aim is to promote agricultural science education in primary schools in the region. In PESP, there are attempts to link classroom theory with productive activities on the school *shamba* (plot). However, its success seems to hang in the balance as this curriculum has no future, because the PSLE tests something else and there are no schools at the secondary level to cater for this type of curriculum. At the same time PESP faces a lack of qualified teachers in agricultural science and those versed in pupil-centred teaching methods as demanded by this curriculum (see Rajabu 1988).

Integration of schools with community

In the ESR plans Nyerere admits that primary schools cannot be expected to be as self-reliant as secondary schools because of the tender age of pupils (normally 7-16 years). However, schools are to be thoroughly integrated into village life. The children must have some responsibilities to the community and the community must be involved in school activities. He calls for the school terms to take into account the various seasons and community's annual activities, so that they can be matched.

The main purpose of integrating the school with the community is to make life less discrepant and ensure that after completing formal education, children are not made to live and work in a totally unfamiliar world. The integration was expected to stall the school leavers going to urban areas in search of employment, to change parents' attitudes and to make the pupils like and value manual work.

Several experiments to integrate the school and the community have been attempted. The first one was the Kwamsisi experiment in the Korogwe district, which started in 1972. School activities were integrated with those of the community and the school was to be the nucleus of development for the village. Pupils were to be involved in campaigns such as on health, nutrition and work in communal farms, while skilled villagers were to take part in teaching subjects such as history of the village and crafts. Extension workers were to come and teach the pupils in their fields of specialization. The curriculum was designed to prepare children for life in the village.

Although the Ministry of Education officials say that the Kwamsisi experiment was a success leading it to be extended to another 33 primary schools, each under the auspices of a teachers' training college (see Rajabu and Shayo 1978), Kilimhana (1975) found that teachers, parents and pupils regarded the national examination as a very important aspect of primary education. Passing the PSLE was considered to be crucial. Indeed, Kilimhana's findings were corroborated by Kweka (1975), who found that parents did not want their children or teachers to participate in school-village projects. Even activities of the school itself that were non-academic were seen to be of less importance.

The most recent study by Katunzi (1988) has revealed that school-village joint projects are rare in community schools. Both parents and leaders are worried about such schools as their 'failure' rate in the PSLE is alarming. Leaders urge teachers to look for strategies to enable their pupils to pass the examination (Katunzi 1988:192). Leaders, the advocates of ESR would like to see teachers teaching for passing examinations, and not furthering community development. Up to 1987 parents', leaders', and pupils' expectations of life after school have remained the same: wage employment rather than agriculture or self-employment in the villages.

To date any community school following a curriculum that is related to environmental studies is at a disadvantage. There is no PSLE that caters for such a curriculum and if a teacher would like his pupils to pass the exam, the only way out is to discard such a curriculum and the activities that might consume a lot of their time. None of these activities are examinable nor is there a future for such a curriculum at the higher level.

Change of attitudes

In ESR it is emphasized that each level of education should be a complete education so that upon graduation, pupils would have changed their attitudes, would respect work and would have enough knowledge and skills to be self-reliant individuals. Each level has to be terminal and should enable the recipient of that education to be self-employed.

Available evidence, however, shows that to date parents and pupils have not changed their attitudes because aspirations still centre around three pillars: secondary education, post-primary training, and wage employment (ILO 1982; Ishumi, Malekela, Bwatwa and Biswalo 1985; Malekela 1977; Mosha 1988; Mnyawonga 1976). Any primary school leaver lacking any one of these three opportunities is normally considered as a failure.

Every October through January almost all parents with children in Standard VII are anxious of the outcome of the PSLE results. Some parents apply for their children to be placed in private secondary schools just in case they miss a place in a public school, which is cheaper. Some parents start preparations for their children as early as they enter grade one through the rapidly expanding 'tuition institutions'. Other parents will not be satisfied with the selection outcomes and query the authenticity of some names whose academic performance had been mediocre. Sometimes results for certain schools are nullified and selected Form I students expelled from school. In December and January regional education offices receive a lot of parents who refuse to believe that their children were not successful.

Parents are unhappy and hesitant to receive them as these children are throttling their expectations. That might partly explain the pathetic situation in which primary school graduates find themselves: they have not acquired adequate knowledge and skills for self-employment, they are idling in rural and urban areas. Nobody knows what they are doing. Those in rural areas cannot use the hand-hoe, there are no concrete plans to accommodate them and consequently they fail to live in villages and are unwanted in towns because of the unavailability of employment opportunities and inadequate housing even for those employed (Bomani 1987:27).

Indeed, the curriculum is still heavily academically biased. Teachers, parents and pupils are working hard to pass the PSLE to enter secondary school. The reputation of a school is judged by the number of pupils selected for public secondary schools, not by the number of graduates remaining in the villages and demonstrating the skills and knowledge acquired at school in productive/manual work. This is succinctly summarized by ILO (1978): "It is probably still generally true that at the end of each stage of education, the student is more an examinee than a producer, and consequently the examination syllabus is identified with wage employment, while the self-reliant activity is more linked to self-employment".

Primary school leavers are expected to remain in rural areas after completing their education. The problem of rural-urban migration is still there. It is exacerbated by education because the educated have normally worked in urban areas. The poor and unattractive rural areas, coupled with the fact that general development strategies in many developing countries are in favour of the modern, urban sector, compel the educated youth to migrate to urban areas where they hope to enjoy life with the educated colleagues already resident there.

In Tanzania the need for wage employment as opposed to self-employment is aggravated by parents who urge their educated children to be wage employed, so that when they are old the financial remittances of employed children may be a constant source of income and a sort of pension to them

(Dubbeldam 1970; Lema 1973). This notion of education as an investment to parents and relatives is not only true for Tanzania, but wherever the extended family system is still predominant (see, for example, Rempel and House 1978).

Unemployment is rampant in almost all developing countries. For example, according to ILO, 36% of the labour force in developing countries is underemployed and half of the unemployed are educated youths (Woodhall 1981). Although estimates of open unemployment rates are few and without reliable statistics (ILO 1982), Ishumi's (1984) study shows that the majority of the urban unemployed have some educational background, as shown in Table 3.

Table 3. *The unemployed's educational attainment*

	Response	
Educational level reached	Number	Percentage
None at all	117	18.6
Standard I-VII/VIII	450	71.4
Form I-IV	63	10.0
Total	630	100.0

Source: Adapted from Ishumi (1984:48)

Data in Table 3 show that the majority of the unemployed in urban areas have had some primary education. Those without any formal education are a minority. This reflects reality because under current employment criteria, which require certificates, those without them stand a very poor chance of getting wage employment in the modern sector. Indeed, as ILO (1982) correctly asserts, education increases the tendency to migrate.

Many primary school leavers continue to try their luck in securing wage employment. A few lucky ones manage to get bottom rank jobs. Some return to rural areas and others remain in towns to join gangs of burglars, pickpockets or conmen; or become a great burden to employed relatives, as by custom these are expected to harbour them and treat them well.

Conclusion

In this article it has been shown that education and productive life had a very close fit in the pre-colonial period. Children were socialized according to the societies' accepted values and practices. All had to acquire knowledge and skills that enabled them to be productive and self-reliant members.

However, following the introduction of Western schooling, children were taken away from their home environment and taught both academic and some practical subjects like agriculture. Those who excelled academically and managed to reach levels that could entitle them to a salaried job had better lives, and often were employed in urban areas where conditions of life were better than those in the rural areas. Due to greater wealth, status, power and prestige among the educated and employed, children and parents alike began to aspire for a type of education that would lead to affluence and privilege.

Attempts to instil in pupils and parents attitudes that would lead children to like and have respect for manual labour have had very limited success (Temu and Komba 1987), both during the colonial and the post-independence periods, despite a clearly stated policy in ESR in the latter period. All along parents and pupils have been reluctant to swallow a curriculum that integrates theory with manual/productive labour, because manual labour does not pay and carries no prestige in the modern sector.

Recommendations

In the light of what has been said above, the following is recommended:

1. In order to integrate education with production, the production aspects of the process should be given some weight in certification. Questions testing the ability to cope with the reality of production and life should be included in the examinations.
2. Since the current economic recession calls for increased production, schools should be in the forefront in production at least scientifically. Agricultural inputs, such as fertilizers, improved seeds and pesticides should be provided to schools at minimum cost without taxation. Agricultural and livestock extension officers attached to villages should also serve schools.
3. There is need to train teachers who are to be given the necessary knowledge and skills to run the ESR projects and to be able to teach as well. Relying on untrained teachers might bring about undesirable results as currently experienced.
4. Pupils and parents dislike agriculture and self-employment for their low status, irregular low incomes and the uncertainties that accompany agriculture. The government will have to raise prices of agricultural

products by minimizing the middlemen institutions in the marketing process, most of which are an unnecessary burden to peasants. For example, a peasant growing maize has to support his primary co-operative society, the regional co-operative society and the national milling corporation, all of which handle his produce.

5. Despite the lip-service paid by the government to agriculture as the backbone of the economy, efforts to raise the living conditions in rural areas have not been very effective. Investment is lopsided in favour of urban areas. There is a need for genuine and deliberate efforts by the government to improve the infrastructure in the rural areas and to extend some of the urban recreational facilities to the rural areas as well. This might halt the rural-urban exodus.

If productive activities are rewarded by certificates, if agricultural produce is well paid, if rural conditions are ameliorated and teachers are trained and facilities provided, it may be possible to integrate education with work in our institutions as pupils, parents and teachers are likely to welcome and support such an integration.

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17.

Self-help Technical Training Institutions and Education with Production in Kenya. The Case of Youth Polytechnics and Harambee Institutes of Technology

Daniel N. Sifuna

Although education with production has not been officially embodied in the mainstream of the education system in Kenya, it is widely practised by self-help training institutions, especially in the Youth Polytechnics and Harambee Institutes of Technology. This has been prompted by the fact that it has become increasingly expensive to finance these institutions on a self-help basis. Although these institutions receive financial assistance from the community, local and international organizations as well as government support in the form of instructors' salaries, they have switched to production in order to subsidize these sources to meet capital and recurrent expenditures. Production has also been adopted as a way of socializing the youth more effectively into the technical and social requirements of the work environment.

Education with production is becoming an ever more important aspect of the educational programmes in many Third World countries. Education with production programmes entail the actual production of goods as well as services which are either marketed or become a subsidy or cost recovery for the school, and radical changes of content and methods and structures in the education programmes. In relating the notions of education and work, the idea is not only to introduce manual productive work, but to encourage the student to undertake practical activities directly useful to society. The focus is upon activities ultimately aimed at initiation to specific kinds of technology, to the creation of objectives and goods useful to society, activities arranged and deliberately integrated into the learning process in all general education and at all levels of the school system (Gillespie and Collins 1987: 12).

It is emphasized that a distinction has to be made between productive work and actual work. The first refers to any kind of socially or economically useful activities that students may undertake, including the maintenance of living and learning premises and the undertaking of community development projects. Production only includes the actual production of goods or services which are either marketed or become a subsidy or cost recovery of the school. In this sense production has an economic value which can be quantified and whose revenues can be accounted for. The definition, it is further pointed out, excludes workshop practice, meaning an activity whereby the emphasis is on the construction of prototypes or the application of techniques. It also excludes practicals, to the extent that their major purpose is to offer an opportunity to improve skills under supervision on a worksite (Hoppers 1986: 9). A common rationale underlying the introduction of production in an educational or training programme is that such activity has not only an economic effect in that it brings about change in the economic environment, but also an educational value. It is considered to contribute to the self-development of the producer. The producer develops knowledge, insights, skills and attitudes which either complement what is being learned through conventional learning situations in classroom settings, or substitute for what cannot be achieved in other ways (ibid).

At the policy level, Kenya has not embraced the concept of education with production, although it is mentioned in a recently published report of the Presidential Working Party on *Education and Manpower Training for the Next Decade and Beyond.* On vocational and technical education the report, among other things, emphasizes the teaching of entrepreneurial skills at all levels of vocational and technical education and the attachment of students to industrial and business organizations for both employer and self-sponsored students. More importantly, it recommends the establishment of production units at vocational and training institutions to provide opportunities for industrial attachment and to generate revenue (Republic of Kenya 1988).

Youth polytechnics and Harambee Institutes of Technology are self-help technical training institutions which initially fell under the broad concept of non-formal education, whose major function was to:

1. provide youths and adults, education outside the formal system of education which does not lead to any value paper qualification but which provides the client with functional knowledge and skills for productive work;
2. provide youths and adults education outside the formal system leading to qualifications. This is deliberately provided as an alternative for them and a forum of second chance education intended to have the same results in both paper qualifications and the attendant renumerations as formal education (United Nations Economic Commission for Africa 1984:4).

The Youth Polytechnics (YPs) and Harambee Institutions of Technology (HITs) programmes are aimed at providing youths with the necessary skills for wage employment or self-employment. They are part of Kenya's response to the familiar situation in which the rate of increase in the number of primary and secondary school leavers far exceeds the rate of expansion of the economy and hence the availability of urban jobs or resources for the expansion of the formal education system at higher levels. These programmes have aroused interest because they illustrate an interesting response to the widespread problem of unemployment and because they partake of the fashionable ideology of 'non-formal education'. The aims of the YP programme have been officially stated thus:

> "*A YP is a low cost training institution in a rural area. It aims at giving primary school leavers from the area skills, understanding and values which will enable them to look for money-making opportunities where they live and contribute to rural development by building up the economic strength of their own country*" (Nairobi 1971: 4).

The HITs represent a community response to the demand for post-secondary education and training opportunities. Whereas Harambee efforts to establish secondary schools have been focused mainly on general academic education, the HITs are unique in their objective to provide training for employment particularly to meet manpower needs in the various fields with a focus on rural development and industrialization. While the HITs represent a community response to the demand for technical training at the post-secondary level, the YPs are an example of a similar response at the post-primary level, where the school leaver problem became a matter of concern in the mid-sixties. The two programmes are tailored "to finish the unfinished business of the school".

The YP programmes include occupational skills in tailoring and dress-making, masonry, woodwork, leatherwork, metal work, motor-mechanics, plumbing and home-crafts. HITs programmes cover engineering, plumbing, masonry, carpentry, motor-mechanics, home-economics, agriculture, garment-making and electrical work.

Youth Polytechnics and Harambee Institutes of Technology are mainly funded through self-help efforts. The self-help effort in Kenya is usually traced back to the traditional pattern of communal work and co-operative effort so evident in many African societies. In the colonial period a partnership developed in which local communities provided land, built classrooms and eventually provided support for teachers, while missionaries and the government provided grants-in-aid, developed teaching materials and trained teachers. Community support for schools and educational programmes is therefore not new in Kenya but seems to have increased in strength after the achievement of independence. A key phenomenon since independence has been the development and growth of *harambee* - a slogan meaning 'Let's pull together'.

Harambee efforts are capable of mobilizing vast amounts of money, and have maintained their force despite severe economic pressures. Two factors help to explain this development. On the one hand, demand for education has greatly expanded because of population growth and the increased number of school leavers who aspire for further education and training. On the other hand, the government is beset by an economic crisis which even threatens the maintenance of existing services. Communities have realized that if they want educational facilities, then they must supplement government provision through their own efforts (Bray and Lillis 1988: 177; see also Anderson 1973: 23).

The quality of Youth Polytechnics and Harambee Institutes of Technology

Youth Polytechnics and Harambee Institutes of Technology now constitute an important component of technical training programmes. The Working Party of the Financing of Higher Education, for example, regarded the YPs as being very important in providing appropriate skill training to primary school leavers, and recommended that all communities be encouraged to establish such centres, that instructor training be upgraded to at least 'O' level, that government supervision be intensified and that research on the most effective utilization of the centres be intensified. It also recommended that other non-governmental efforts to provide post-primary technical training be encouraged and more such programmes be established (Republic of Kenya 1982: 15).

Although there is considerable enthusiasm and optimism at the policy level and in a number of studies about the apparent success of YPs and HITs training programmes, there are a number of factors that have seriously militated against their success and led to changes in their programmes. Looking at most of the YPs, one cannot but be profoundly impressed with the determination and resilience of their management to provide employable skills to the youth of the community in the face of greatly adverse circumstances and extremely limited resources. Most of the facilities were built by the YPs themselves and vary in quality and adequacy. Some of the instructors are not qualified, formally or informally, in the subjects they offer, and the quality of management also varies widely.

It is difficult to talk generally about their quality. There are naturally wide variations reflecting the communities that they serve. Some YPs, very few in number, offer programmes that are almost as advanced and certainly more diverse that those of some HITs. Others are little more than one-classroom rural schools. An analysis of the overall pattern of courses offered reveals a heavy reliance on three basic courses: carpentry, masonry, and tailoring. Few offer training in agriculture and the idea of work groups of self-employed leavers does not seem to have worked out on a significant scale (Loubser 1983: 63).

The Youth Polytechnics

Recent research indicates that the YPs are getting more and more formalized: many now aim at their trainees passing the Government Trade Test Grade III on completion of the two-year course. Some have started dormitories and are adopting other trappings of the school system, such as uniforms (Court 1980: 156-157). Increasingly, some have enroled trainees from other areas, selecting them on the basis of performance in primary school and have begun to enrol secondary school leavers.

This trend can be justified on one important ground. In a society that is highly qualification conscious and where access to employment and wage income, as well as advancement in both respects, are effectively controlled by formal qualifications outside the informal sector, the formalization of the YPs is highly predictable. Since there can be no whole-sale abandonment by the formal sector, particularly the public sector, of what has been called the 'certification syndrome', there is probably little sense in resisting this trend. It is quite understandable that the communities who invest the resources, and youth who spend two years in time and fees amounting to over Kenya Shillings 1,000 per year, would wish to maximize access to employment through some kind of recognized formal qualification.

The Harambee Institutes of Technology

It is equally difficult to generalize about the HITs. They constitute a heterogenous range of institutions. What they have in common is that they were started on a Harambee basis and consequently all suffer, in varying degrees, from chronic shortages of recurrent as well as development funds. As a result plans are partially implemented, only a few courses are offered, teachers are in short supply and enrolments are quite limited. The end result is increasing dependence on government and donors and comparatively high unit costs for this level of training. Only a few of the institutions have a regular income from Harambee efforts; in most cases the initial fund raising for the establishment of the institute was the last such effort.

It does not take much imagination to realize that operational expenditures and development funds of the magnitude required by the HITs would be extremely hard to raise in even the most well-off communities. Similarly, in spite of the fact that several of the HITs have fairly large farms, their income earning capacity in support of their recurrent expenses is really very limited and can be expected to remain so.

Consequently, many of the HITs generally do not offer a wide range of courses, a factor that graphically illustrates the limited extent to which they have been able to realize their original plans, despite the determined efforts and hard work of their sponsors and staff (Loubser 1983: 58).

Education, training and production

In both the YPs and HITs students pay some fees, the government helps to pay some instructors and to purchase tools. Some of the institutions benefit from the generosity of donor agencies in addition to community support through Harambee contributions and occasionally individual donors. While government and donor agencies support is at times relatively steady, Harambee and individual funding are not. This has made it necessary to find alternative sources of funding. This has led to adopting units of production.

Towards a better integration of training and production

Another important factor that has contributed to YPs and HITs embracing the production aspect has been the poor performance of ex-trainees in wage-employment. Graduates of YPs and HITs have been found to be very inadequate and even have to be retrained on the job. An evaluation report of the Danish International Development Agency (DANIDA) on the quality of training in HITs noted that "compared to other skill training programmes in which training first and foremost takes place on the job, the HITs will always be at a disadvantage regarding real work experience" (DANIDA 1979). The report also observed considerable diversity in training at the HITs. It was argued that "(...) it is only those few HITs where workshops are fully equipped that anything resembling practical work experience on the job can be approached. In the majority of HITs the physical facilities and equipment simply do not allow a true practical bias in training". The team added that "the presence of a production unit at an institute does not in itself (...) guarantee access to practical on-the-job experience" (ibid.).

There has been considerable debate on the relevance and value of practical learning, especially on-the-job training. It has been asserted that it is too specific. Bennell (1981) has argued that such specificity may in fact render the trainee less adaptable to other situations and other employers than does the more widely focused institutional training. Yambo (1986) has raised questions regarding the effectiveness of industrial attachment programmes, production units as a source of practical experience, and in what ways the two can be improved.

The general ineffective performance of graduates from YPs and HITs has, however, been attributed partly to the training programmes which adopt school approaches and do not expose the students to the real work or practical environment. Such training, which is for production rather than through production, is said to be artificial, devoid of real work experiences and the graduates usually get overwhelmed when they get to the real world of work. As a result of the absence of practical experience, graduates leave these institutions and plunge into the world of work ill-prepared to perform efficiently.

To correct this situation, YPs and HITs and other training institutions, have been admonished to provide some period of work experience of whatever form to ensure relevant training. Government departments and local firms have been requested to support production programmes in these institutions by advancing and adopting a policy of giving them contracts as part of their production programme. Many institutions, especially HITs, are now involved in real production, probably aimed at complementing theoretical training with actual productive work, to make training more relevant and effective, which is especially useful where industries are unwilling to offer such training facilities to students.

Achievements: the present reality

Besides training, YPs now involve students in a variety of productive activities which are related to their courses. In woodwork and carpentry, for example, they produce goods which they sell to the students, parents, instructors and the community in general. The items produced include building materials such as windows and doors, furniture for homes, restaurants, bars and schools. The students and instructors also sell their services to the community by way of fencing homes, farms and institutions, by building and constructing roofs and by the repair of furniture.

In masonry courses, students and instructors make blocks and bricks partly for use in their building construction activities and in the construction of buildings within their polytechnics. The rest are sold to members of the public. Some of the YPs have secured contracts from schools, government departments and individuals to supply building materials. Some have also secured contracts to construct shops at local markets, party offices, schools and houses.

In the tailoring/knitting and dress-making courses, students make their own uniforms (dresses and sweaters), other uniforms for schools and clothes for sale at local markets. Members of the local community take cloth and wool to students and instructors to make clothes and sweaters for them at reasonable prices. YPs with home economics courses make hand woven items and prepare different types of foods they sell to local markets.

Metal work appears to be one of the busiest departments in many YPs. Alongside training, they manufacture items which are easily marketable in the rural setting. Some of the products include domestic and farm equipment like buckets, cans and water tanks, chicken and cattle feeders. They also produce metal building materials, wire mesh, iron gates, stoves and various types of home utensils. The high production in this area would be attributed to two factors. The first is the readily available market, and the second is the use of scrap metal which is commonly found in the localities. The scrap metal is cheap and is therefore easily purchased by the YPs.

Training in motor mechanics is not a popular course in many YPs. The few YPs that have this particular department find it expensive to run it, due to lack of training resources like tools, spare parts and cars. Many motor vehicle owners are also reluctant to take them to YPs for repairs. A few of these instructors, especially in the urban areas which offer the course, engage in simple repairs and get only little money in return. The department is however not very productive in terms of goods and services.

Some of the rural YPs have acquired sufficient land for agricultural training. Those in urban and densely populated districts lack sufficient land and are therefore unable to offer courses in agriculture. It should be stressed that in actual fact not many YPs, even those located in good agricultural districts, have incorporated agriculture in their training programmes. Their major focus is on technical training activities (see Sifuna and Shiundu 1988: 55-56).

Practically all the established HITs have some kind of income generating activity. There are two major categories of training with production programmes. First, there are those institutions producing through training activities where the instructors produce goods as they give demonstrations and students produce as they carry out practical training, applying their theoretical knowledge. In some cases the instructors and the final year students engage in specific productive projects with the dual objectives of training and production of goods. In this kind of institutions the instructors and the students are the main producers, with little help from other personnel of the institution.

In the second category, there are institutions with special units of production. In addition, by way of training programmes, the institutional management have set up separate units whose main goal is production. They have special personnel, operate on business lines and must make profit. They also play the role of a model farm where students can practise skills and further their training, but they still insist on good performance and maximization of profits. Examples of production activities in HITs are the following:

Institution	*Production activities*
Kiambu	Carpentry and joinery units, an extensive coffee farm, poultry farm, manufacture of equipment for solar energy;
Kirinyaga	Tailoring and garment-making unit, building and construction unit, an extensive coffee farm, an orchard farm;
Murang'a	Tool and machinery unit for producing farm and agricultural equipment, building and construction unit, coffee farm, dairy farm;
Rift Valley	Extensive wheat farm, construction-stone quarry, extensive dairy farm, tailoring and garment-making unit, manufacture of irrigation equipment;
Sang'alo	Dairy, poultry farm, piggery farm, sugar-cane farm, maize farm, carpentry and joinery unit, building construction unit, metal works unit;
WECO	Masonry and building unit, irrigation and water maintenance unit, general engineering unit.

(Sifuna and Shiundu 1988: 86-87).

The administrative structure of the institutions and features of the programmes are very much influenced by each of the categories which have either integrated production in their programmes or have production units attached to the institutes. Many of the institutes, however, belong to the first category.

Most of the HITs offer two or three years of technical training. In the first year, or in the first part of the course, the training is mainly theoretical and exposure to the practical aspects occurs through observation. Theoretical training in institutes which offer agriculture, for example, include subjects in biology, chemistry, physics, mathematics, principles of agriculture, geography and language (Kiswahili and English). The students are then gradually introduced to practical activities to acquire productive skills and involve in a little production. Towards the end of the course in the final year they become more of producers than trainees (Sifuna and Shiundu 1988: 97).

Conclusion

Based on the analysis of the available literature and contracts with various training institutions, the following have come up as the advantages of training with production:

- It provides a work-like environment as it is in the real world of work for which the students are being prepared. The students have the opportunity to train in an environment similar to what they will work in after they leave the institutions. Thus the transition from training to employment is eased.
- Production is a very important source of revenue for the institutions.
- Students can earn while they train with a fund set-up, with a proportion of the products accruing from production. From this income students can pay their tuition and examination fees and buy tools which they will need after leaving the institutions.
- Students have the opportunity to repeat again and again what they have learnt. This is very necessary for reinforcement and yet it is not possible without some relatively permanent unit of production. Occasional contracts cannot provide this opportunity.
- Students begin to see the worth of their training at an early stage and get motivated to learn.
- It develops leadership qualities in the more understanding trainees if they are put into a position of monitoring production and being responsible for the completion of jobs.
- It provides the opportunity for effective appraisal of the students. Instead of distant attachment, they practise within the units of production in the institution, and it is easier to assess their progress by seeing the quality of their individual work. In this way the poor cases can be helped early enough and much more easily by the instructors responsible. When a group of students are working on a product, the weak ones can learn from the bright ones and catch up faster.
- It provides a useful transition from training to employment.
- It is one way of bridging the gap between theory and practice.

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18.

Facilitating the Transition from School to Work: a Study of the Effectiveness of Work Experience Programmes in Secondary Schools in the Commonwealth

Zellynne D. Jennings

This article examines the extent to which different types of work experience programmes (WEP) in Commonwealth secondary schools have succeeded in achieving the objective of preparing more young people for the working world. Despite problems, including a lack of material and human resources and negative attitudes towards agricultural work especially, many positive features of WEP emerge in the article. Benefits to both schools and pupils are discussed.

Providing incentives to employers to make more work opportunities available to school leavers, and the centralization of the organisation of WEP, particularly in the developing countries, are underscored as some of the ways of improving the effectiveness of work experience programmes.

Work experience programmes (WEP) are an outgrowth both of a thrust towards making education more relevant to the needs and interests of young people, and of attempts to make schools' curricula respond more directly to the demands of national economies by giving the youth skills which are readily usable in the labour market.

Youth unemployment since the 1970s has increased significantly in both developed and developing countries of the Commonwealth. Youth unemployment in 1980 as a percentage of the total unemployed ranged from 67.2 (India), 66.2 (Barbados), 55.9 (Australia) to 42.3 in the United Kingdom (ILO 1982). While acknowledging that economic difficulties, especially in the developing countries, are partly to blame, the ILO attributes the problem partially to the fact that "training systems have not succeeded in adapting their teaching methodology or curricula to the requirements of the labour market" (ILO 1986:16). Many developing countries are aware of this.

In developed countries, the situation is not vastly different. An ILO report (1986) highlights the fact that the young generation of Europe are finding the doors of a working career closed to them "because of the mismatch of their education and training with the skill needs of the new and emerging technologies" (1986:5) and exhorts the need to strengthen existing weak links between school, work and industry. WEP constitute one way in which many European countries have sought to strengthen such links.

Some have dismissed WEP on the grounds that "it is difficult to see what benefit could possibly arise. Work experience is superficial and temporary, permanent employment is a worker's livelihood. Work experience cannot convey the pressure of having to go to work, to perform competently, to hold down a job (...). Work experience cannot show young people the pressures on workers any more than observing their own teachers in situations of stress" (a British Careers Officer quoted in Walton, 1976:11).

Over a decade ago, in a study on WEP in Third World Countries, Sinclair (1977) concluded that programme objectives were far too ambitious and that the programmes themselves had serious problems including deficiencies in teachers' skills, material resources and negative responses from both students and parents. "For most Third World countries", she wrote, "the best policy would seemingly be to leave work experience programmes severely alone!" (1977:303).

With special reference to Commonwealth countries, this paper seeks to: 1. identify the main types of WEP in Commonwealth secondary schools and to give a brief description of their structure and organization; 2. to assess the effectiveness of WEP in terms of the extent to which objectives identified have been achieved; 3. to outline the main difficulties experienced with different types of WEP and to suggest some ways in which these programmes could be made more effective. Data for this study were drawn from two main sources:

1. eight case studies giving an overview of attempts to link schooling with work in the educational systems of the Commonwealth Caribbean. One study was written by the author and others were consulted at the Caribbean Network of Educational Innovation for Development (CARNEID) office in Barbados;
2. a questionnaire sent to Ministries of Education in Commonwealth countries, the full details of which are given in a larger study done for the Commonwealth Secretariat in London (Jennings 1987).

Main types of Work Experience Programmes

'Work Experience' in this study is taken to mean opportunities on a compulsory or voluntary basis for full-time secondary school students to engage in work as part of their education programme. Table I sets out the main types of Work Experience Programmes (WEP) in Commonwealth secondary schools. These come under the broad category of Through-Put Training which refers to an approach where the emphasis is on education and training in an institution wherein successive cohorts of youth move through a standard programme normally of five years' duration, at the end of which they leave to find their own employment (Hoppers 1985). WEP are of two main types: in-school and out-of-school. Many schools combine both.

In-school WEP

There are various types of in-school WEP. In Zambia, for example, where food production by the people is a vital necessity, the policy is that production should be included in schools' curricula alongside practical subjects with a vocational orientation. In practice, 'production' is treated as a separate subject in the curriculum although a link between the practical subjects' syllabi and production unit work is encouraged (Ministry of Education and Culture, Zambia 1977). In most Zambian schools, everyone (including teachers) is involved in production work (vegetable, field crops, poultry, pigs etc.) for one to three periods per week.

In contrast to the Zambian example is a work-study programme in the Marion High School in Southern Australia for school leavers who have been unable to find employment. The programme takes place on the school campus and follows an industrial mode because it is structured within a 35-hour week and uses the cultural environment of the work place. The grade 11-12 students work in a genuine job situation under the supervision of qualified personnel and are released to attend classes in two subjects of their choice. The students receive pay for 15 hours of work per week, which enables them to earn in excess of unemployment benefits. Printing, computer operation, office work, garden and grounds maintenance, food preparation and animal care are among the jobs available (Hannaford 1982).

The Elim Agricultural School in Jamaica offers a 35-hour week of work-study which combines formal instruction, indoor laboratory work and work on the school's 220 acres of farm land. Sixty percent of curriculum time is spent on the academic subjects (English, mathematics, physics, chemistry and biology) while forty percent is devoted to the study of agricultural theory and practice. Over a three-year period, students spend over 1300 hours working on the farm (Jennings 1986).

During their last two years in the Community High Schools in Guyana, students specialize in pre-vocational areas and are involved in a work experience programme in their final year. Work in school takes many forms. In Beterverwagting, the first Community High School to be established in 1973, students in the agriculture department do vegetable farming and small livestock rearing on five acres of land. Students in Industrial Arts undertake such tasks as the construction of a broiler unit for the school farm. They also build and repair furniture and run electrical lines for their workshops and they repair household appliances for members of the community. Home economics students cater for Village Council meetings.

Students in Industrial Arts and Home Economics in Jamaica's New Secondary Schools and Trinidad and Tobago's Senior Secondary Comprehensive Schools (SSCS) do similar types of work. Larger SSCS simulate a production line technique in their workshops, thus giving the youths some experience of what they are likely to find in industry.

Out-of-school

The Secondary School Community Extension Programme (SSCEP) of Papua New Guinea integrates practical projects (e.g. in experimental agriculture, plantation agriculture, livestock) with the core subject academic curriculum of maths, science, social science and English in such a way that the skills developed in the practical projects reinforce those learnt in the core subjects. Work Experience in SSCEP spans both in- and out-of-school types. Schools which did not have large areas of land suitable for the development of these practical projects established 'satellite outstations' away from the school site. Here the students live for a part of the school year (half to one term) doing project work and continuing their general education programme. Involvement in such project work has enabled youths in Papua New Guinea to apply the techniques they learnt in the academic subjects to solving practical problems in the community. Vulliamy (1981), for example, describes a school in which community extension work was promoted by groups of 20 or more students staying in a village for four to five weeks to work on a project helping the villagers to re-establish a disused coconut plantation.

The out-of-school WEP in secondary schools in Guyana involves students in their final year being attached to a business or industry for varying periods; four to eight weeks en bloc; six to twelve weeks on a day release basis (two days per week maximum) or three to six months (one day per week). Block periods of work experience are organized during the vacations.

The WEP in New Secondary Schools in Jamaica and in the SSCS in Trinidad and Tobago is very much like that described for Guyana. In

Jamaica, however, on-the-job experience is limited to a block of 21 days normally during the last term in Grade 11, the final year of school. As in Guyana, every effort is made to ensure that the on-the-job experience is tied as closely as possible to the student's vocational area of study.

Junior Achievement Programmes are designed to give secondary school students the opportunity to learn first hand how a business operates and the principles of a free enterprise system. In Barbados and Jamaica the programme is sponsored by local Chambers of Commerce with some international funding (e.g. USAID in Jamaica). Groups of 15-25 students (aged 14-18) are helped to set up their own companies with the advice of middle or senior management staff in well-established firms. They are presented with charter licences from their advisory or counselling company which legalizes the company's status and operations. The advisers spend about three hours per week with the students over a period varying from four to seven months. During this time, the students decide on the type of business they want and sell shares to raise operating capital. They elect their own officers, map out their marketing strategy, pay wages to workers in the company etc. They also have to pay a nominal rent for the premises used. The companies formed are usually of a manufacturing type which uses a production line technique. At the end of their work experience, the officers are required to liquidate their companies, publish a report and return any dividends to the shareholders.

In contrast with WEP in schools in developing countries, those in the developed countries of the Commonwealth are not geared to vocational training. In Britain, for example, vocational training falls under the umbrella of the Manpower Services Commission Youth Training Scheme (YTS). The latter offers 16-year old school leavers a one-year training programme, part of which involves on-the-job experience. WEP in Australian schools vary considerably from state to state and even from school to school within a state. In some schools students engage in work participation; in others they do work exploration. In the latter, students observe work and learn about it theoretically; in the former students actually work. Many WEP are aimed at the non-academic, potential school leavers and students with behaviour problems. They also focus on manual and semi-skilled jobs, but some programmes involve experience in professional and semi-professional areas, e.g. architects' offices, dentists' and doctors' surgery, while others yet emphasize community welfare programmes such as 'meals on wheels' (Collins and Gillespie 1983).
Duration of placement also varies in Australian schools - from five to fifteen days. Some schools operate a 'rolling' system which involves on-the-

job placement of a smaller number of final year students each week, usually for a period of two weeks, while the remaining students continue their normal school work. Other schools operate a 'block release' system implemented in various ways: in some, all the final year students are away from school during the same one-week period; in others, the classes are split into two separate blocks with each block doing on-the-job experience at different times during a term (Stratton and Murray 1984). Some British schools operate a half-day placement over one month. Project Trident, however, insists on three week placements (Kenny 1980).

Cole (1978) describes a South Australian high school which has a 'transition class' offering a six-week 'crash course' for students in their final year of school. Many of these students are designated 'low achievers'. They are taken from their normal classes into a transition class on a full-time basis. Here they are given courses in career guidance, communication skills, basic mathematics, home management, financial management, typing and on-the-job experience.

State Secondary Schools in New Zealand have work experience units which cater to the needs of students of very limited ability during the first two weeks of secondary school. These units receive special funding in terms of teaching entitlement, teaching space and financial assistance for visits to work places. The programmes of study are specially designed for low achievers, and the work experience they have is normally in places of work where the level of skill demanded is not very high.

From Table I the following become evident: that in-school WEP are mostly found in developing countries of the Commonwealth and that many of these schools combine a work-study curriculum with field practice (i.e. on-the-job experience); that the loci of work experience range from production units, workshops, indoor laboratories, the school farm to outstations several miles from the main school. The preceding has also shown that different systems are operated for the placement of students on work experience with the period of placement in developing countries tending to be for a longer duration while that in the developed countries of the Commonwealth tends to be more flexibly operated during the school term. Table I also includes the full range of WEP objectives.

Achievement of objectives

There was no evidence in our sources that WEP in Commonwealth secondary schools were evaluated in any systematic way. To the question what criteria are used to assess WEP, the responses from the countries varied from "student, staff and employers' reports" (Seychelles), "summative evaluation forms are issued to employers" (Guyana), "only verbal assessment randomly between instructor, student and workshop managers" (Botswana) to "there are no specific criteria used in New Zealand to assess work experience programmes". This, therefore, makes an assessment of the achievement of objectives of WEP rather difficult, since evidence based on research is limited.

Little is known about the achievement of philosophical/pedagogic objectives. There is, however, evidence that in their attempts to achieve a balance between the academic and the practical, the scales tipped the balance in favour of the academic in the SSCEP outstations. The teachers feared the disapproval of the Inspectorate and students for deviating too far from the academic syllabi (Crossley 1984) - which is understandable, given the social prestige accorded to academic curricula in many developing countries of the Commonwealth. In Zambia, because the number of pupils out on production work at any one time is too large for the few available tools or for the production area to accommodate, many schools have had to resort to carrying out production activities after school hours. This has incurred the resentment of some teachers and pupils who feel that this interferes with their free time. In some schools, moreover, all examination classes are exempted from production work. This has tended to lower the status of production work in relation to the examinable school subjects (Kaluba 1986).

On a more positive note, Stratton and Murray (1984) report that in Australian schools that operated the WEP on a block release basis, a substantial proportion of teachers were able to visit the students at their workstations. This resulted in a better understanding on their part of the world of work and this enabled them to make the content of their teaching more relevant to the needs and experiences of the students.

The success of WEP in developing positive attitudes to manual/agricultural work has been minimal. In Zambia, for example, involvement in production units has met with negative attitudes on the part of the parents who regard agricultural work in schools as a waste of time (Shanks 1983). Students in Jamaica's new secondary schools who specialize in agriculture and do work experience in that area invariably opt for 'white collar jobs' (Jennings-Wray 1982). Papua New Guinea presents a different picture. Here, work in outstations reinforces positive attitudes towards agricultural work and village life which are already nurtured in the culture.

Table 1. *Typology of Work Experience Programmes in Commonwealth Secondary Schools and their range of objectives*

TYPOLOGY	Locus of work experience	In School	Out-of School	EXAMPLES	OBJECTIVES
TROUGH-PUT TRAINING					
Correlation with regular curriculum	production units	x		Zambia	P1, 5, 6, 7,: S1, 2, 5, 8: E4, 7-10
	outstation, community		x	SSCEP (PNG)	P1, 3, 5-7: S1, 2, 5, 8-10: E1, 4, 7-10
Work study	industrial plant on school premises	x		Marion High, Australia	P1, S2, 5-8: E1, 3
	indoor laboratory, school farm	x		Elim Agric., Jamaica	P1, 5, 6: S1, 2, 5, 8, 10: E7, 8-10
	workshop, school farm	x		Community High schools, Guyana	P1, 2, 3, 5, 6: S1, 2, 5, 8-10: E4, 7, 8-10
Field practice	company established under charter license of advisory company		x	Junior Achievement Programme (Jamaica, Barbados, Bahamas	P1, 8: S5, 6, 8: E4, 11
	on-the-job		x	Britain	P1, 3, 5, 6: S3, 4, 6-9, 11: E2, 3, 5.
			x	Canada	P1, 3-6: S3, 4, 6-9, 11: E2, 3, 5, 6
	work experience & on-the-job		x	New secondary Schools, Jamaica: SSCS, Trinidad and Tobago	P1, 3, 5, 6: S1, 2-9: E1, 2, 3
		x	x	New Zealand	P1, 3: S, 3, 6, 7-8: E2, 3
Transition class	classroom instruction & on-the-job	x	x	Australia	P1, 3, 5, 6, 7: S3, 4-8, 11: E3, 5, 6

Key to objectives (Table 1.)

Philosophical/Pedagogic (P)

1. Facilitate transition from school to work.
2. Equalize work opportunities.
3. Improve the opportunities of the less academically able.
4. Acquire practice experience in literacy and numeracy skills related to specific jobs.
5. Motivate youth by making curriculum more relevant to their experiences and needs.
6. Maintain a balance between the academic and the practical in school's curriculum.
7. Integration of knowledge and practical skills.
8. Learn principles of free enterprise.

Economic (E)

1. Reduce economic costs by keeping the youth longer in school.
2. Preparation of low achievers for lower skill jobs.
3. Assisting youth in getting permanent employment.
4. Enable the youth to set up self-employment projects.
5. Enable an exploration of business and industry.
6. Sample a variety of jobs.
7. Supplement school budget.
8. Attract youth to careers in agriculture/village farming.
9. Develop agricultural basis of national economy.
10. Promote economic self-reliance at national level.
11. Attract youth to careers in business.

Social (S)

1. Develop positive attitudes to agriculture/manual work.
2. Instil healthy work ethic.
3. Learn how people earn their living.
4. Enable correct career choice.
5. Instil self-discipline and self confidence.
6. Learn importance of attributes desirable in good employees (e.g. co-operation, punctuality).
7. Increase awareness of employer's expectations.
8. Learn the nature of social relations at work.
9. Facilitate communication between school, parents and employers.
10. Integrate school with community.
11. Occupy potential drop-outs and truants.

A consistent finding is that WEP contribute to the development of attitudes and dispositions (e.g. punctuality, willingness to take orders, to co-operate) which employers value at the work place (Jennings-Wray & Teape 1982; Ministry of Education and Culture, Guyana 1979). Stratton and Murray (1984) concluded that Australian students "have a more mature view of work and appropriate work related behaviour after work experience".

Evidence on the achievement of economic objectives is very limited. This has to do partly with the fact that some of these objectives can only be assessed in the long term, and even so their assessment remains problematic. How does one, for example, assess the extent to which a WEP has promoted economic self-reliance at the national level? Or helped to develop the agricultural basis of the national economy? SSCEP, however, has achieved some of its economic objectives. Tracer studies have shown that some 60% of grade 10 SSCEP graduates returned to village farming, even though only some 8% of these set up self-employment projects (Weeks 1987). The majority returned to help their parents on the land using more modern techniques of farming.

Schools with in-school WEP have also been able to supplement their budgets. In some cases the supplement has been so substantial that the schools prefer not to submit their financial returns to the Ministry of Education. There is also the added problem as has been observed in the case of Guyana, of "a tendency for schools to over-emphasize self-financing activities at the expense of the stated educational purpose" (Paul et al. 1986:386).

Production units in Zambian schools have met with variable success. The evaluation conducted by Shanks (1983) showed the majority falling short in terms of educational and economic benefits. One rural boarding boys' school, however, was exceptional. Its income from its produce (field crops, rabbits, cattle, vegetables) exceeded its expenditure. Shanks concluded that "the range of activities and interests such a unit as this generates demonstrates well the potential educational value of production units in schools (1983:22). Kaluba, however, warns of a need to "re-examine the programme's policy objectives and be realistic about the potentialities and limitations of programmes of this kind with regard to such issues as employment preparation for school leavers" (1986:38).

Studies on the WEP in Jamaica's New Secondary Schools and Guyana's Community High Schools have shown that some youngsters are offered permanent employment in the work stations where they did work experience (Jennings-Wray & Teape 1982; Ministry of Education and Culture, Guyana 1979). In the developed countries of the Commonwealth WEP have enabled young people to explore business and industry and sample a variety of jobs, although the limited time for the WEP has tended to press them more into work observation rather than direct work experience (Watts 1980).

Despite the limited nature of the evidence in their effectiveness, work experience programmes continue to flourish. The Commonwealth countries underscored benefits from work experience for the students, the school and the employers. For the students, "the transition from school to work is much easier: they acquire skills and use machinery and equipment not available in schools" (Guyana); "it changes their attitude towards work" (Mauritius, India) and enables them "to acquire skills necessary for income generation and self-reliance activities" (Tanzania). Benefits in the school include "maintenance of school compound; efficient utilization of resources" (India) and for the employer "free and cheap labour" (Tanzania), "he gets raw hands with positive attitudes toward work" (India, Guyana), "he has an opportunity to assess the strengths and weaknesses of a prospective employee in a way not possible when that employer is dealing with a normal member of the work force" (New Zealand). The response of the Director of Schools in New Zealand to the question of the cost benefits of work experience is worth noting since it highlights an important long-term benefit. While pointing out that the cost per pupil of catering for the needs of a student in a work experience is significantly higher than providing for the same student in the main stream of the school the Director posits: "in the long term, however, there would be clear cut benefits. Many students in work experience units would find survival in the mainstream particularly difficult. Their self-images would be further damaged, and their sense of alienation against both the school system and the wider community would deepen. Cost benefits, therefore, arise principally from avoiding the social consequences of this kind of damage". The respondent from the Department of Vocationalization of Education in the National Council of Educational Research and Training in India perhaps best sums up the overall opinion of work experience programmes amongst the Commonwealth countries:

> *"Although the cost of providing work experience is more than any other regular subject in the school system, but still, looking to its contribution to all aspects of learning, behaviourial changes and employability, it has become indispensable in the school curriculum."*

Difficulties encountered with work experience programmes

In-school WEP

Whilst underscoring the value of work experience programmes, the respondents from the Commonwealth countries did not diminish the problems experienced with these programmes. The following emerged consistently as problems with in-school WEP. In schools that operated production units, agricultural work programmes, school farms etc., buildings erected for housing livestock, food storage etc. were invariably inappropriately designed. There was an absence of adequate financial capital for the initial establishment of the unit or work programme and insufficient working capital to meet the recurrent cost of seeds, pesticides, fertilizers etc. Poor water supply, inadequate land space and poor soil quality, insufficient supply of farm tools, poorly maintained equipment also emerged as real problems. Some schools also suffer severely from theft of their crops, materials and equipment. In one of Jamaica's New Secondary Schools, for example, over an eight month period in the 1985-86 school year, over J$135,000 worth of losses was incurred in farm products, not to mention that 15 of its pigs were stolen, three cows and a milking machine. What is known locally as 'praedial larceny', however, is a major disease which is crippling many farmers in Jamaica today.

Many developing countries have to import costly feeds which the schools cannot afford. This leads to a shortage of feeds which, in turn, results in a decline in livestock rearing. Another serious problem is the absence, invariably, of the specialist knowledge and expertise needed for the effective and efficient operation of in-school WEP. For example, in Zambian schools, agricultural science departments, which should be able to make the most significant contribution to food production, are either not involved in the production units at all, or their involvement is minimal (Shanks 1983). This, however, appears to be symptomatic of a more endemic problem - negative attitudes on the part of teachers, students and parents towards in-school WEP. Zambian parents have scant regard for agriculture. The students, while they like practical subjects in the curriculum, generally do not like production unit work. The teachers question how they, with their training in subjects unrelated to food production, can be expected to become good managers of food production activities which require specialized knowledge, technical ability and some business competence (Shanks op. cit.)

Out-of-school WEP

A number of difficulties have also been identified in relation to out-of-school WEP. According to New Secondary School students in Jamaica, the gravest problem they encountered on work experience was the fact that the regular workers gave them the more menial tasks to do (Jennings-Wray & Teape 1982). They also complained of not being able to do work experience in their area of vocational training. Similar findings have emerged in Guyana (Ministry of Education and Culture, Guyana 1979). Poor supervision of students at the work place, employers' unrealistic expectations, the lack of incentives to students due to the fact that they rarely received pay on work experience were other difficulties identified by Guyana, Sri Lanka, India, the Seychelles, Papua New Guinea, and Jamaica. An efficient system for transporting rural students to work was also highlighted by such countries as India, Guyana, Tanzania, Jamaica and New Zealand. In the U.K., Canada, and Australia, the main problems identified were insufficient visits to students on work experience by teachers, the lack of pay, the costliness of public transport, the loss of good employers due to poor attendance at the workplace by some students, the difficulty of providing realistic work experience for the brighter students and the heavy workload of the teacher responsible for the WEP (Walton 1970; Hitchcock 1980).

While developed countries, because of their level of industrialization, can offer greater variety of work experience opportunities for young people, insufficient numbers of employers willing to place students is a real problem in many developing countries. This is compounded in some countries by competition from other training programmes. In Jamaica, for example, since 1982 when the government introduced the Human Employment and Resource Training Programme (HEART) in 1982, out-of-school youths involved in the on-the-job training which the HEART programme offers, have competed for places in private and public sector enterprises with the grade 10-11 students in New Secondary Schools who participate in the WEP. Incentives in the form of tax benefits accrue to employers who participate in HEART and this motivates them to offer places to HEART trainees in preference to the New Secondary School students.

Towards improving the effectiveness of work experience programmes

Because of a lack of published evaluation studies of WEP, much valuable information on these programmes remains inaccessible. In some countries, assessments of students on work experience are carried out. In Guyana, for example, at the end of the work experience, the Work-Study officer organizes a de-briefing session attended by students, parents, representatives of management and the Ministry of Education. The primary purpose of this session is to identify attitudes acquired, other outcomes and the strengths and weaknesses of the work experience. The information gleaned is supplemented by summative evaluation forms submitted by employers. Work experience diaries kept by Australian students and in which employers have to complete an evaluation of the students' performance provide similar types of information. However, there is a case for clearly defined criteria for assessment of WEP to be worked out. These could be used from country to country, thereby facilitating cross-cultural comparisons that would enable the identification of the type of programme which best suits particular contexts in which young people are being prepared for the world of work.

Work experience programmes are costly, particularly so in developing countries of the Commonwealth where they tend to be integral parts of vocational education geared to training in employable skills. This requires the provision of trained teachers in the vocational areas and well equipped workshops which are adequately maintained and supplied with equipment, tools and materials. Some of the costs remain hidden, being either passed on to employers or to the students' parents; for example, the risk of injury at the work place and the need for compensation, and the need for protective clothing. Students, furthermore, are often asked to bring from home raw materials needed in workshops. Additionally, there is the hidden cost of staff time in monitoring and supervising students on work experience - a cost usually not budgeted for by Ministries of Education in the developing countries of the Commonwealth. In an effort to improve the effectiveness of WEP, these hidden costs need to be taken into consideration. For students who are not paid even a nominal sum while on work experience, the travel expenses they have to meet from their own - or rather their parents' - pocket, is an additional burden. Likewise for work experience teachers, who have to bear the cost of travelling on visits to students at their workplaces. This partly explains the frequent criticism of inadequate supervision at the workplace. Clearly, however, there is room for guidance in supervision especially for employers who lack supervisory skills. Providing employers with forms of assessment that are easy to use and not time-consuming should prove helpful.

With the increased participation of schools in out-of-school WEP and the competition for the limited number of placement opportunities which has resulted, there is a need for encouraging more employers to open their doors to young school leavers. The use of incentives in the form of tax benefits, as in the case of Jamaica's HEART programme, is likely to prove attractive. In general, however, employers need to be given more detailed information (perhaps through seminars, workshops) about how out-of-school work experience fits into the curriculum of the school. They need to be informed of the level of skill training which takes place in pre-vocational or vocational training programmes in schools so that they could not only have a more realistic expectation of the students, but would also be better able to determine the necessary inputs to be made into training at the workplace.

Finally, the organization of WEP, including liaising with employers, is a costly process in terms of the time and effort and financial resources expended by the work experience teacher or officer, particularly where teachers in individual schools have to make their own arrangements. Such efforts tend to be unco-ordinated and invariably result in frustration when several schools vie for the same employer. Developing countries may find it wise to move towards a centralization of services for the organization of WEP, as experience from developed countries suggests that, when effectively administered, such a centralized system helps to curtail school costs. Cope (1980) describes the case of a Local Education Authority (LEA) in Britain which employs an Industrial Liaison Officer whose task it is to make arrangements with industrial, commercial and service employers, and reach agreement on the content, administrative arrangements, timing, number of pupils, working conditions etc. Once a full programme of schemes has been arrived at for the term or year, the officer distributes the work experience opportunities as equitably as possible between the schools within the LEA. The officer is assisted by Career Officers who make the necessary contacts with the schools. Each school then selects the students suitable for each scheme and prepares them for work experience.

In Tasmania and Western Australia, support for local school WEP is provided at the State level. The Tasmanian schools work through a central co-ordinating body, the Work Experience Advisory Committee, and a State Co-ordinator. A calendar of work experience, prepared on information submitted by State and independent schools, enables the timing of programmes to be co-ordinated. An advantage of this arrangement is that centrally collated computer-based information becomes available to the schools. They can get all pertinent data on work experience programmes and the types of jobs available.

Conclusion

This study has to some extent confirmed the observation made by Sinclair a decade ago that the objectives of work experience programmes in developing countries are ambitious and wide-ranging and that particularly the in-school WEP have serious problems including a lack of material resources and negative attitudes towards agricultural work, especially on the part of students and their parents. These negatives, however, are balanced out by the many positive features of work experience programmes. Respondents from Ministries of Education in Commonwealth countries all agreed that WEP bring substantial benefits to both students and their schools. Student benefits are seen mainly in terms of what they had learned about the world of work and how the experience had contributed towards their getting employment. Out-of-school WEP are of benefit to schools in that they make it possible for students to receive training and exposure to equipment and facilities in industry or private enterprises which the school cannot afford. In-school WEP contribute to the income generating capacity of the school, thereby reducing reliance on the central government for funds.

Much can be done to improve the effectiveness of work experience programmes. More systematic evaluations of these programmes, for example, would provide the programme organizers with valuable experiences that could guide their own practices. A centralization of services for the organization of WEP would also go a long way towards the elimination of the frustrations that many schools in the developing countries of the Commonwealth experience as a result of having to vie for the limited number of work experience opportunities available. Perhaps what is needed above all is for industry, the business world and private enterprise to accept that the preparation of young people for the working world is as much their responsibility as it is the schools'. Working hand-in-glove with the education system they could contribute a great deal towards making work experience programmes more effective.

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19.
The Educationalization of Vocation

Shobhana Verghese

The author offers an educational alternative for the non-productive and alien scheme of education existing in India today. She comes to the formulation of this alternative scheme, with its focus on the preparation for productive life and orientation towards Indian culture, after comparing the indigenous Vedic system of education with the imported British educational system, and after an analysis of a survey conducted over two generations of women from two different communities.

From the *Gurukula*[1] of the *Vedic*[2] Age to the *Navodaya*[3] of 1986 has been a long haul for us in the Indian sub-continent. The former was overwhelmingly successful in effectiveness and relevance to its time, that is, during the Ancient Hindu Period (2000 BC down to 300 BC) in its original form. Later it was influenced by Buddhist overtones for about 500 years, followed by the Turko-Afghan era, when the Islamic form of education was introduced but indigenous classical learning was permitted to co-exist. But the latter is woefully and shamelessly inadequate in coping with the needs of contemporary India: largely an agrarian population still struggling in an abysmally backward condition.

The Education Commission of 1964-66 claims that: "The future of India is now being shaped in her classrooms". If this is so I resist and oppose this 'future' with everything I have, since, after 41 years of independence we have only succeeded in developing a sort of neo-colonialist attitude which has failed to internalize true democratic values and which, in spite of all "protestations about nationalism and the superiority of national culture (...) fancies (...) the most meretricious and trumpery emanations of the pop culture of the West" (Vittachi 1987: 15).

I may run the risk of being labelled pessimistic, negative, overly critical. Yet the truth must be faced - our educational structure is not delivering the goods, either fast enough or well enough - we are no longer what we were in the golden ages of our mighty civilization which has been in existence since the beginning of civilized life around 3500 years ago.

Historical background

Education in the Vedic Age

In order to appreciate how far away we are from our classical heritage in education, I briefly describe the Vedic system which constituted one of our greatest claims to fame and has survived in its pristine glory (with some adaptation to urban life as that developed) until the advent and establishment of British domination by the latter half of the 19th century.

Educational thinking in every country is unmistakably influenced by the philosophy of the people and the age in which it is seen. Ancient Indian educational concepts and aims were no exception. This philosophy held that Man was one manifestation of the Supreme One and therefore part of the Universal Whole. But because Man is chained to the cycle of birth, life and death, it came to be believed that, if he controlled his passions and worldly senses, at the same time acquiring and using knowledge and wisdom, he would be released from this endlessly repetitive process, since ignorance meant bondage and knowledge deliverance. Education therefore came to mean:

1. self-realization through meditation;
2. comprehension of the eternal truth through sacrifice; and
3. the acquisition of ultimate knowledge, which would lead to a release from the eternal cycle of rebirth.

Therefore, crucial to the attainment of this goal was the development of intellectual power and moral strength. In other words, the basic aim of Vedic education was to enable self-sacrifice and salvation.

In addition, since the Supreme could be reached only after a meaningful journey across life, social motivation in order to fulfil responsibilities as a son, husband, a father and a social being, was also emphasized.

Hence Education for Salvation, or *Par Vidya*, and Education for Worldly Living, or *Apara Vidya*, together made up the curriculum. Systematically this meant that the 'syllabus' included spiritual knowledge, knowledge of the objective truth and knowledge of sacrificial rituals, together with the study of literature and linguistics (Sanskrit), astrology, law, geometry and arithmetic, astronomy, anatomy and botany.

These 'lofty' subjects were imparted through the novel institutions of the Gurukula which was actually the home of the *Guru*[4] or teacher. Pupils were in the constant company of their Guru, who, in the absence of books, was a human conduit of knowledge and an ideal character to emulate. Education was a mode of life characterized by self-control: Fees were contributed in the form of manual labour around the Gurukula. Eventually, *Yoga*[5] was developed and functioned as the road to discipline, morality and absolute knowledge alongside intellectual exercises to build mental strength, alertness and proficiency. The products of this system formed the cornerstone of our unique civilization.

Classical education survived for thousands of years in this form, and though exposed to a variety of multi-cultural currents, never lost its singularity of purposes. True, it neither covered the female half of the species nor the 'common people' (the former were educated at home in the arts and domestic duties while the latter received a truly vocational education according to their father's occupation), but then neither did mass and universal education exist in other parallel civilizations.

Colonial education

It was only with the establishment of the British Empire, by the middle of the 19th century and with India being the 'Jewel' in its 'Crown', that Vedic education met with its first competitor - in and at the hands of the zealous British administrators, a species quite without equal.

"The habitual imperial stance We and Thou - we who know what is good for you and you who should therefore obey us (...)" (Vittachi 1987: 14) was firmly embraced. Deciding that the natives were "Sullen peoples, half-devil and half-child" (Kipling), the thing to do was to "invent a new breed of surrogate Englishmen" (and women) who could "(...) form a class who may be interpreters between us and the millions whom we govern; a class of persons Indian in blood and colour, but English in taste, in opinion, in morals and in intellect" (Macaulay). This vision was seen as early as 1835 when the official British policy was formulated in response to the felt need of building a recognizable middle class consisting of "compradores, soldiers and clerks, trained and organized as loyal servants of the Crown" (Vittachi 1987: 35). Many minutes, reports and recommendations later, the very tapestry of the native educated psyche was altered, and thus that form of formal education was instituted which is in existence even today. Regretfully, no attention was paid to another opinion advanced around the same time by Sir Charles Metcalfe about the Indian village communities: "(...) I dread everything that has a tendency to break them up."

Starting from premises like the famous one which claimed that "a simple shelf of a good European library was worth the whole native literature of India and Arabia", propounded by that admirable gentleman, Lord Macaulay, educational reform was geared to the 'well-trained Indian'. In no time it was decided that all available funds would be earmarked for the spread and maintenance of Western education through the English language (Lord Bentinck). This was, perhaps, the single most overwhelming turn about in the history of Indian Education, for, in one sweeping grandiose stroke, it downgraded traditional learning and the institutions which offered it, to the extent of pronouncing that the 'orientalists' were not worthy of employment while the 'anglicists' were.

And so, we marched straight down into the *Babu*[6] culture, the great aberration, which shames us even more today. This clerical monster needed for the administrative machinery was the predominant species to emerge from the academic portals - a class routinely capable but crippled in both ability and inclination towards responsible and progressive output.

Present day education

Over the span of a century and a quarter the Woods, Hunters and Sadlers before Independence and the Mudaliar's, Kothari's and various Boards of Education after Independence argued happily about both (1) the "virtues of education for education's sake and vocational training for utilitarian ends" (Vittachi); and (2) the fork in the road to the future, one of which was signposted 'Their way' and the other 'Our Way'. What emerged was a national curriculum based on a three-language formula, a general academic course which included modern mathematics, the social, physical and life sciences together with an element of vocationalization through any one socially useful and productive activity like tailoring and typing. Religious education is, by and large, ignored in schools, since the governmental thrust is towards secularism, and what is, perhaps, even more disheartening, is the neglect of Value/Moral Education, which, even when undertaken, is done in a hurried and haphazard manner. This syllabus negates and belies the dream of the late Professor A.N. Basu, Founder Principal of the Central Institute of Education at New Delhi, that the core syllabus "starts with and uses to the fullest extent, the national culture and traditions of the land, fosters a legitimate pride in the past achievements of the country but is always watchful of the future development of India as a modern democratic nation (...) its object [being] a harmonious synthesis between Indian and Western culture with its basis on the former" (Basu 1932: 289-90).

While synthesis it is, harmonious it is not. The emphasis is not on Indian culture or tradition and the thrust is to catch up with the West: on the road to this worthy target we have disorientation, cross-cultural confusion and frustration, materialism of every shade and hue which has the dubious distinction of being the sole justification for corruption in every part of civil life, rapidly weakening spiritual, religious and social mores, linguistic handicaps, rampant white collarism and what have you.

Indeed, it has been a long haul to present day education.

The crux of this symposium is reflected in the position paper stating that education is "the process of transferring knowledge, norms and values" in order that man may "be able to function as a person" in his specific society and in the "cultural, social or economic reality in which the individual(s) later finds himself". This includes the ability to produce something materially and make a definite contribution, socially or spiritually, to the strengthening of the community lived in. So the tragic question now arises - whose knowledge, norms and values are we following? Those set by our ex-colonial masters or those inherent in our classical heritage?

I need not answer this for all those readers familiar with the long-term back-lash of the Imperial *Raj*.[7] Suffice it to say that today children are stuffed onto one end of the conveyer belt which moves "inexorably forward in its self-serving potential without any correlation to imagination, creativity, philosophy or spirituality" (Vittachi 1987: 60).

"The same curriculum of colonial education with its concentration on formal distinctive categories, such as the arts and the sciences, and its bias against training in life skills, its value(s) (...) of measuring human worth by what a man HAD rather than what he WAS to himself and to others" (Vittachi 1987: 61-62), continues merrily on. Even more dangerous is the fact that the common national core syllabus is imposed, without discrimination, throughout our enormous country on both the rural and the urban population.

Navodaya

With much fanfare and hot air, the New Education Policy of 1986 launched a boldly optimistic scheme named Navodaya or a 'new awakening' for the rural and semi-rural districts - a sector traditionally neglected. Without further ado 256 schools were inaugurated all over our vast country. The nation held its breath. But predictably, the euphoria lasted only a short while - the planners have neither prioritized nor funded the scheme adequately, nor thought out a more efficient and relevant syllabus.

With a sinking heart I note that the syllabus being implemented is exactly the same as the one being followed in the cities, which shelter the volatile urban millions who are battered by cross-cultural influences, the cosmopolitan realities of shortage and corruption, over-crowding and unemployment; who are marked by cultural stagnation and are moving swiftly away from traditional values and norms of behaviour without an adequate substitute to centralize upon and are characteristically disoriented, dishonest, undisciplined, intolerant, materialistic and unimaginative to boot. Do we want this 'future' to be shaped in our rural and semi-rural classrooms too? A population which is, as yet, relatively calmer?

The bleak facts

To illustrate the need for a drastic change in our educational approach, faced as we are with the dilemmas of development in a rapidly shifting culture, let me present an analysis of a survey conducted over a small field of women from two successive generations, from two radically different communities living in the metropolitan city of Calcutta. It concerned Bengalis[8], the local, traditionally urban community, and the Rajasthanis[9], a recently migrated business and trading community from the West of India who have uprooted themselves from a secure and culturally balanced semi-rural background. The field has four groups:

1. Bengali girls aged 14-18;
2. Rajasthani girls aged 14-18;
3. Bengali mothers whose average age ranges from 35 to 45;
4. Rajasthani mothers whose average age ranges from 35 to 45.

Groups 1 and 2 showed similar trends in the areas mentioned below, arising from a deep and constant awareness of the fact that their parameters are far broader and more universal than those of groups 3 and 4, and they desired a lifestyle different from the one groups 3 and 4 lead at present. Briefly, the analysis indicated:

	Group 1	Group 2
1. Insecurity due to the speed with which the world is changing:	60%	68%
2. A growing desire to be productively employed after completion of education:	98%	93%
3. An increase of occasional clashes with their mothers:	78%	81%
4. Clashes with their mothers mainly concern		
- social and religious obligations:	65%	70%
- dress and speech patterns:	65%	65%
- work related issues:	70%	62%

5. Both group 1 and 2 want a change in the areas listed below, in order of priority:
    1. lifestyle
    2. productive work
    3. freedom
    4. finance

Sharp contrasts were seen between group 1 and 2 in some crucial areas too:

1. Type of Education opted for after school:
   - Group 1 - 90% for professional degree courses
   - Group 2 - 50% for liberal arts degree courses.
2. Type of work:
   - government and corporate service
     - Group 1 - 35%
     - Group 2 - 10%
   - private business venture
     - Group 1 - 35%
     - Group 2 - 70%

The picture revealed above is not an encouraging one in many respects. Insecurity breeds many new dangers to society. Parental opinions and instructions are no longer accepted as valid, and active rejection in many spheres of life, especially social and religious, indicate the breaking down of traditional mores and reflect the desire for a changed lifestyle in no uncertain terms. The percentages are too large to be ignored. Further, the urban, deeply rooted pattern of 'white collarism' needs to be broken and the potential for private enterprise strengthened, if the nation is to make a beginning in solving its staggering unemployment problem.

The young are disoriented while at their most vulnerable - is the pop culture of the West the answer?

I move on now to what groups 3 and 4 feel on the issues which form the basis for their daughters' disorientation, frustration and insecurity.

1. Positive attitude to daughter continuing professional or formal education:
   - Group 3 - 95%
   - Group 4 - 75%
2. Clashes with daughters are recorded in the following order of importance:
   - Group 3
     - study
     - manner of dress and speech
     - religious and social obligations
     - freedom
   - Group 4
     - social and religious obligations
     - dress and speech
     - study time
     - freedom

3. Attitude to marriage arrangements:
    Group 3 - 45% after daughters professional education was completed
    Group 4 - 42% whenever a suitable proposal comes in, regardless of level of education.
4. Positive attitude to engaging in productive work themselves:
    Group 3 - 24%
    Group 4 - 8%
5. Permitting daughters to engage in productive work:
    Group 3 - 52%
    Group 4 - 25%

While this is a sketchy picture at best, it does reveal nevertheless that while group 4 would like their daughters to avail themselves of formal education, they would not hesitate to withdraw their girls whenever a suitable proposal comes along. A contradictory attitude indeed. After marriage, it is still relatively rare for women to continue an interrupted educational course. Yet, though not more than one quarter of groups 3 and 4 work themselves, between a quarter and a half of them desire to see their daughters engaged in productive work. This is surely an encouraging attitude when one considers that though group 3 is relatively better educated, with 47% taking a first degree, in group 4 the same percentage have only reached high school (many would not have taken the school-leaving examination at that).

Coming back to the mainstream of this analysis, I state categorically that 'Pedagogic Stuffing' is not needed for either type of pupil. What we do require right now is not the vocationalization of education but the 'educationalization of vocations', as was so delightfully expressed by the Chairman of the Central Board of Secondary Education, New Delhi, at a Conference organized by the National Productivity Council for Principals of Schools. If the core of each stream is a vocation and relevant education is layered across it, would we not reach a happier compromise, happier than the one in operation now, which has an academic core and a semblance of vocationalization through work education seen dimly in the background?

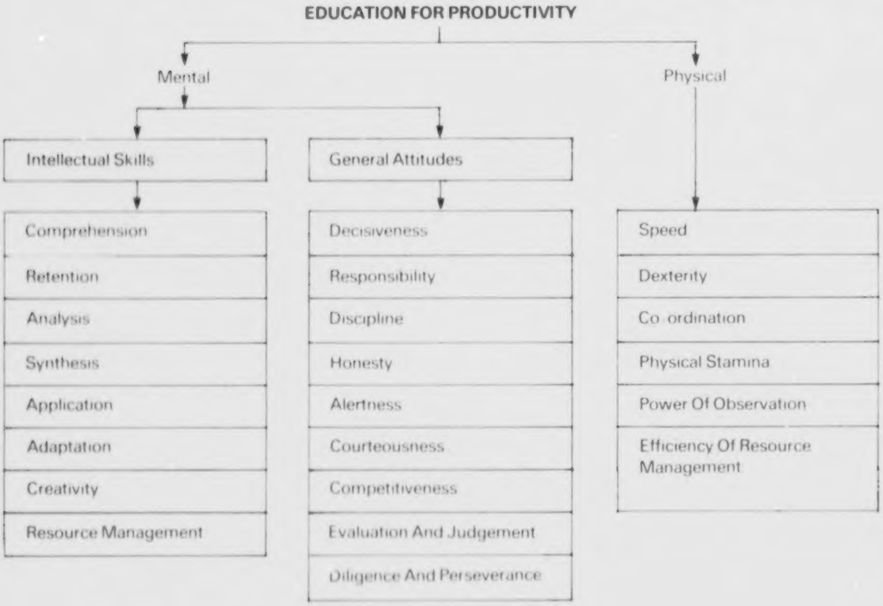
Proposal for an educational approach

After the free compulsory general foundation of eight years primary education guaranteed to every boy and girl till the age of 14 by the Indian Constitution, Article 45, based upon :the tapestry of Indian life enriched with threads from the West" (Ronaldshay 1924: 48), a post-primary four year phase should be installed. It should be segmented into the basic vocational streams, that is, the commercial, the artistic, the scientific and the professional, each of them with a clearly defined syllabus targeted at developing specific attitudes and skills, along with a small academic stream leading to university. All vocational streams would share common ground in the continuation of the development of general life skills - a very definite focus would be placed on the vocational core spread over at least two-thirds of the available time.

Here I briefly return to the analysis of attitudes of Bengali and Rajasthani pupils. The productive trend seen in microcosm in the Rajasthani pupils with a recent semi-rural background will be increased and improved through educationalizing vocation, instead of reinforcing and continuing the white-collarism reflected in the urban Bengalis, who prize university education more highly than is good for them.

The essence of this streaming was advised as early as 1882 by the Hunter Commission - today we pay the price of ignoring sound, professional advice given more than a century ago.

Figure 1. *A general curriculum for all streams in post primary education*


EDUCATION FOR PRODUCTIVITY
Mental
Physical
Intellectual Skills
General Attitudes
Comprehension
Retention
Analysis
Synthesis
Application
Adaptation
Creativity
Resource Management
Decisiveness
Responsibility
Discipline
Honesty
Alertness
Courteousness
Competitiveness
Evaluation And Judgement
Diligence And Perseverance
Speed
Dexterity
Co ordination
Physical Stamina
Power Of Observation
Efficiency Of Resource Management

I visualise the curriculum for all these areas (see Fig. 1) as that which will develop increasingly productive mental and intellectual skills, coupled with a physical and manual dexterity (whenever called for), both desperately needed to rescue the average Indian, rural or urban, from his worst enemy: himself. I am firmly convinced that if education and productivity come to mean two phases along one continuum, the first being the means to reach the second through carefully chosen content matter and an equally carefully chosen learning/teaching scheme, the pupils will emerge from a twelve-year system (with an 8 + 4 pattern) as self-reliant adults totally employable on the one hand, and/or equally capable of independent and productive self-employment on the other. All this presupposes the government's commitment to human resource development on a priority basis in terms of Very Hard Cash - a commitment which it has had a very poor track record in, when seen in comparison with that allocated to defence, for example: what was earmarked for education in the Sixth Five-Year Plan period was exceeded by the allotment for defence in the first two years.

Implementation and recommendations

To the objective of educational reconstruction, CESO (an avowedly research organization) can play a vital role in funding and guiding research in:

1. syllabus development for educationalizing vocations;
2. textbook enrichment; and
3. reconstruction of teacher-training courses for each of the vocational areas.

Research into the syllabus to be included in each vocational stream to make it a feasible proposition is, perhaps, the crux of the issue. Pupils emerging from the four-year course should be capable of producing the richest possible dividend as independent members of society. Each of these syllabi would need to cover the theoretical and practical aspects of learning and training and, in so doing, provide scope for the development of all the intellectual, general and physical attributes in pupils along desirable lines.

The textbook, being a key resource material in the hands of teachers with varying levels of ability, must be the teachers' ally in developing the intellectual and general life skills mentioned earlier. Unfortunately this is not so in India today. The textbooks produced even by national research institutions and recommended for use throughout the length and breadth of the nation, are merely repositories of vast bits of information, and used only to infuse KNOWLEDGE with no effort being made to go beyond the level of memory in the intellectual hierarchy. Since the best minds are no longer attracted to the field of education, more relevant and effective support must be given to teachers within the content matter, if they are to be enabled to reach all the potential levels in their pupils' intellect. Our pupils, like any other, need much stimulation in the areas of application, adaptation and evaluation, but hardly ever receive this - teachers would be enormously benefited if superior textbooks with accompanying handbooks were made available.

Both these developments should come about in combination with a dramatic reorganization of teacher-training courses, if teachers are to handle the educationalization of vocation(s) in a relevant and efficient manner. Practical skills will have to be developed - this will have the additional effect of bringing teachers out and down from the ivory tower they now find themselves in, and more in touch with the real world and its needs.

If only the Navodaya, or Centres for Excellence, the government's way of equalizing opportunities for the rural and urban sectors, had related its policy to life around, it would not be attempting to duplicate the disorientation and frustration of the cities. I see no virtue in providing equal opportunities if they only serve to cut off traditional values without any justifiable result - white-collarism will continue and so will unemployment and migration to already overcrowded metropolitan cities. What to teach and how to teach is a simple enough equation, if the thrust of the government is in the right direction - the Educationalization of Vocation(s) right now. As a parting shot I would like to add that Government policy should be framed by those with vast experience in the field - not ladies and gentlemen who have not taught for a day, nor understood the complexities of a child's mind, nor even analyzed the crying needs of society around them.

Let me conclude by one of the most beloved of Rabindranath Tangore's poems, in which he visualizes the India of his dreams:

Where the mind is without fear and the head is held high;
Where knowledge is free;
Where the world has not been broken up into fragments by narrow domestic walls;
Where words come out from the depth of truth;
Where tireless striving stretches its arms towards perfection;
Where the clear stream of reason has not lost its way into the dreary desert sand of dead habit;
Where the mind is led forward by Thee into everwidening thought and action;
Into that heaven of freedom, my Father let my country awake.

Notes:

1. *Gurukula*: Literally the house of the preceptor, forest school of ancient India.
2. *Vedic*: Education based on the Vedas, which means knowledge or science.
3. *Navodaya*: Literally a 'new awakening', refers to the residential schools to be set up in rural areas.
4. Guru: Preceptor, spiritual teacher.
5. *Yoga*: System of meditation.
6. *Babu*: A native clerk who writes English.
7. *Raj*: Sovereignty
8. *Bengali*: A resident of Bengal, a state in Eastern India.
9. *Rajasthani*: A resident of Rajasthan, a state in Western India.

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Girl's Participation in Technical and Vocational Education in China

Kan Feng Min

China's drive towards economic reform and modernization requires more people with adequate technical and vocational knowledge. However, the educational quality of the labour force is generally very low, especially that of women. Of the 43 million working women, 90% are farmers and workers mainly engaged in physical labour. If women are to play their part in facing the challenge put forward by modern production methods, they need to have access to technical and vocational training opportunities as well as equal and unrestricted access to the labour market. Although progress has been made in the recent past, girl's opportunities for training and employment remain very much determined by traditional values regarding the role of women in the family and society.

Technical/vocational education has a long history in China. But this type of education was not developed on a large scale because of the underdevelopment of industry in old China.

After the establishment of the People's Republic of China, the Party and the government have paid more attention to the development of technical/vocational education. They have given a whole series of instructions to educationalists at different levels and taken a series of measures in order to standardize this type of education. Thus technical/vocational education developed.

In recent years, with the rapid economic and social development, the lower educational quality of the labour force has been at odds with the modernizations of industry and agriculture because the present labour force could not meet the demands of the four modernizations. Presumably, vocational education has the most direct effect on the quality raising of the labour force and the development of the economy. So China has devoted more attention to this type of education.

The Thirteenth Congress of the Party has pointed out that many efforts must be taken to strengthen vocational and continuous education by all means and to establish a big labour force with excellent quality and discipline.

This report has put the development of science, technology and education into an important and strategic position in the economic development of China. Technical/vocational education has developed further. On the basis of 1986 statistics, the number of senior technical/vocational schools reached 15,734 and the number of students was 5,32 million, representing 38% of the total number of students in senior secondary schools. Technical/vocational education is now playing an important role in the whole educational system.

In China today, both the development of society and the realization of the four modernizations need a labour force of excellent educational quality because the industrial structure is changing; industries requiring knowledge and technology are replacing traditional production procedures stressing physical labour. More and more work is being done by people with technical/vocational knowledge; however, the educational quality of the labour force is generally very low owing to historical, political and economic factors. Therefore, the present labour force is challenged by modern production methods.

In this situation, women's problems are obvious, because in today's labour market, the educational and technological level of the majority of women is much lower than that of men. Of the 43 million working women in the country, 90% are farmers and workers mainly engaged in physical labour, only 4,8% are professional personnel and officials. While physical labour was being replaced with the development of technology, women's educational quality could not meet the demands of the new situation. Among women staff members, there is less administrative engineering and senior professional personnel. Therefore, compared with men, women lag far behind in the position and function of production and work. Women's positions in the labour market, in fact, have been threatened because of their lower educational quality. For example, many women have had to leave their jobs as they were not qualified to do them when modern production methods were introduced. So women have to improve their educational level to suit the economic reform and the changing industrial structure. Otherwise it will be impossible for them to equal men in the labour market and to keep their hard-won economic positions.

Having considered women's problems in education and the labour market and the situation of Chinese economic and political reforms, my research attempts to examine women's participation in formal and non-formal technical/vocational education and training programmes, to find out about the problems and their causes and the solutions to these problems. The research will mainly focus on the following three topics:

1. How extensive is the participation of girls in formal technical/vocational education in China?
2. How extensive is the participation of women in non-formal technical/vocational education and training?
3. How extensive is the participation of women in the labour force? And what is its relationship to women's participation in technical/vocational education and training?

This article mainly deals with the first question: the examination of girls' participation in formal technical/vocational education at a national level.

Epitome of the national development on technical and vocational education.

Middle vocational education received little attention in old China, but since 1949 this education has been considered as a necessary part in the Chinese educational system and socialist construction. Many policies and regulations were issued and a series of concrete measures adopted to develop vocational education. In old China, the educational system and policy only served rich people; the majority of the working people were kept out of schools by their poverty. The number of schools and students was very low. In new China, however, the government has changed the old educational system and policy. For example, schools are open to the majority and the educational policy is to raise the educational level of the whole nation.

However, before we come to the details of the national development of technical/vocational education, it should be pointed out that political movements have had a great influence on the development of this type of education. Because of this it has followed a slow and difficult path in its development.

1951-1957

In this period, the main task was to regulate the technical schools handed down by the Kuomingtang government and then to establish a guiding ideology for the development of this kind of education.

After the establishment of New China, the government took over the old senior technical/vocational schools and step by step, carefully reformed them.

As early as 1951, the Ministry of Education held a conference on middle technical/vocational education. It was pointed out that the essential principle and task of middle technical/vocational education was to train large numbers of primary and middle technical personnel who had a basic knowledge of general cultural science, a good command of modern techniques, and a healthy body.

To perfect the principles and policies on running such technical schools, the Government Administration Council issued 'the decision on the improvement of the middle technical education' and 'the regulations of middle technical schools' which stipulated that all citizens between 15 and 25 in the People's Republic of China should sign up for entrance examination at this level. The enrolment age for the worker-peasant cadres, industrial workers and minorities was at 30 and the graduates of these technical schools were all assigned by the related administrative departments. By then, a new set of principles had been mapped out after regulating and reorganizing the technical/vocational education for several years.

1958-1960

China started its Great Leap Forward in 1958. In this year, great changes took place in every field in China. Middle technical education developed greatly, the number of schools increased from 728 to 4,261 and the number of students increased very quickly, from 0.428 million in 1957 to 1.373 million in 1960. Meanwhile, the vocational schools had also grown conspicuously.

As technical education at this level developed quickly, its scale became so large that the national economy could not accommodate its expenses, because in this year new China's industrial level was still very low and its agricultural production could hardly meet the needs of the people. The country just started developing. Eventually it exceeded the level of industrial and agricultural production and the educational enterprise itself. As a result, the growth of technical/ vocational education influenced the improvement of educational quality as a whole.

1961-1965

Having faced the problems of large-scale educational development, the Ministry of Education held two conferences in 1961. The main purpose of the conferences was to reduce the scale of middle technical education, to equally distribute the number of students in various specialities and to raise educational quality by means of regulating the work. In accordance with this spirit of reform, many technical/vocational schools newly built in 1958 were closed. Their number was greatly reduced from 4,261 in 1960 to 865 in 1963. As the most important concern in this period was to raise educational quality within two years, apart from the establishment of half-work and half-study schools, the technical schools slowly and steadily developed. Eventually in 1965 there were 871 technical schools and 7,294 vocational ones.

After 17 years of practice China had gained some experience in running technical and vocational schools and now began to work out a more complete set of rules, regulations, and teaching documents and built a large number of schools with good facilities and conditions for study.

1966-1976

These ten years were the period of Cultural Revolution in which no regular teaching was performed in schools. Criticism of the old educational system was widespread. General education at different levels was at a standstill. The national educational system was badly damaged and a great number of technical schools were closed or changed into factories. In short, there was no special concern for the technical and vocational education in these ten years because of the political movement.

1978-1988

In these ten years, China experienced several important changes in education, politics and economy. To meet the demands of the economic reform, China needed technical personnel to raise the quality of its labour force for the realization of the four modernizations. Therefore the government showed a great concern for this type of education.

At the conference on national education in 1978, Deng Xiao-Ping asked to enlarge the number of vocational schools in middle education. Furthermore, the report on government work in 1979 stated that middle education should run all kinds of vocational schools with specified plans. This was badly needed by the socialist construction and also helpful for solving the employment problems of high graduates. New policies of enrolment and assignment were worked out, different from the former ones issued in 1954, in which technical and vocational schools only enroled graduates from junior or senior middle schools. The graduates from technical and vocational education were not all assigned by the related administrative departments as they had been since 1954. Some had to find jobs by themselves.

In recent years, many concrete principles and measures have ensured that middle technical/vocational education will meet the demands of the economic reform. In other words, the key task of technical/vocational education is to regulate, reform, reorganize and develop steadily. All these efforts have achieved good results. By 1984, China had 3,301 specialized schools, 3,465 technical schools and 7,002 vocational schools. The majority of graduates from these schools have made contributions to the development of the country. Where do girls stand in this picture? Do they have the same opportunities in technical and vocational education?

Development and problems of girls students in technical and vocational education.

In the old semi-feudal and semi-colonial China, the adage that 'a woman without talent is a virtue' was accepted by all society. The majority of school-aged girls had no access to education; therefore, 90% of the women were illiterates.

Since liberation, Chinese women have experienced earth-shaking changes in their political, social, cultural and family-lives. Women's equal rights have been ensured in the state's law. In order to eliminate all unequal stipulations which limited women's access to education, a series of important reforms were made in China's educational system. The adage that 'a woman without talents is a virtue' has been criticized and challenged. Now the majority of girls have more access to education at different levels. Therefore, the educational level of Chinese women has been raised. The ranks of women intellectuals have been developing and the number of women joining the ranks of science and technology has been increasing.

According to state statistics, by 1985, there were 3.34 million women scientific workers, which comprises 31.6% of the total number of women in the labour market in China. Of the total number of engineering technicians, 6.23 million were women - 18.3%; 6.39 million women were agricultural technicians, 14.18% of the total number. Furthermore, 9237 women had been advanced technicians till 1983.

What is more important, girls have more and more access to middle technical and vocational education. The tables below illustrate this.

Moreover, in order to raise girl's openings for employment and their social status in the new employment situation three women vocational universities, 14 middle vocational schools and several technical and vocational centres have been established. A large number of girl students has graduated from these universities and schools.

All these facts show that Chinese women's technical and vocational education has greatly improved and the number of girls enroled has been increased, as the above tables indicate. The graduates not only can find more jobs than those without technical/vocational education, but also play their roles in Chinese economic reform.

Table 1. *Junior Vocational Education of Industry and Agriculture*

Year	Total Number		Number of Females	
	enrolment	graduation	enrolment	graduation
1984			66,049	23,678
1985	454,302	115,057	64,852	30,433
1986	154,501	97,412	58,528	38,060
1987	417,269	117,558	158,839	47,486

(source: the Education Committee of China 1988)

Table 2. *Senior Vocational Education of Industry and Agriculture*

Year	Total Number		Number of Females	
	enrolment	graduation	enrolment	graduation
1984	454,411	140,791	317,826	89,562
1985	1.843,410	506,216	417,924	136,228
1986	973,832	93,917	425,647	195,083
1987	2.142,755	669,201	1.004,438	309,431

(source: the Education Committee of China 1988)

Table 3. *Senior Technical Education of Industry (Unit:10,000)*

Year	Total Number	Number of Females
1985	39.5	36%
1986	39.8	36,7%
1987	42.5	36.8%

(source: the Ministry of Labour 1988)

Distribution of girls in technical and vocational schools

Although the above achievements in the development of technical/vocational education reveal how China has achieved certain gains in girls' participation in technical and vocational education, it does not mean that China has no problems in girls' technical and vocational education. As a matter of fact, some problems still exist with two of them being obvious.

The first one is the uneven distribution of girls in formal technical and vocational education. Girls mainly concentrate on specialities which closely relate with women's traditional roles. For example, in China's first girls' vocational school in 1984, 18 classes, with more than 800 students were divided into four specialities: secretarial and type-writing service, pre-school education, tourist service and beauty services. Such services are still regarded as women's occupations in China. Another example, the first girls' vocational school in Gansu province was also set up in 1984 to create employment opportunities for girls. With the help of the local government and the Women's Federation, the school opened ten specialities in cosmetology, practical art, health care, English-typing, accounting, pre-school education, operation of macro-computers, sewing, practical English and family assistance.

Girls are still trained how to perform skills related to women's traditional roles. Other girls' vocational schools are more or less the same, since they also offer only feminine specialities. The idea for them to open these feminine specialities is to create job opportunities for girls. Meanwhile, they also think these specialities can meet the demands of social development and provide fitting work. The trouble is that they do not realize these traditional attitudes towards girls' roles are the main obstacle which prevents them from adopting modern branches in the labour market.

Compared with the girl students in girls' vocational education, girl students in general technical and vocational schools are much better off. Although girls in the general vocational schools mainly focus on the feminine specialities, more girls have the opportunities to study the specialities formally set aside for boys. Also, more girls like to take specialities in science and technology. Investigations made in several schools in Shanghai show both girls and boys regard scientific work as their ideal work (see tables 4 and 5).

Table 4. *Order of work preference for students in Middle Schools*

No.	Total group	Male group	Female group
1.	scientific work	scientific work	scientific work
2.	medical work	administrative work	medical work
3.	educational work	medical work	educational work
4.	administrative work and sports	military work	recreational work
5.	recreational work and sports	recreational work and sports	administrative work
6.	military work	educational work	military work
7.	commercial work	commercial work	commercial work
8.	industrial work	industrial work	industrial work
9.	agricultural work	agricultural work	agricultural work
10.	individual work	individual work	individual work

(source: Education and Occupation, Vol.1, 1987)

Table 5. *Occupational preferences of students (in numbers and percentages)*

	1	2	3	4	5	6	7	8	9	10
Total Number	160	42	33	16	30	14	4	1	0	0
Percentage	53.3	14	11	5.3	10	4.7	1.3	0.3	0	0
Male Number	91	14	11	8	9	14	3	0	0	0
Percentage	60.7	9.3	7.3	5.3	6	9.3	2	0	0	0
Female Number	69	28	22	8	21	0	1	1	0	0
Percentage	46	18.7	14.7	5.3	14	0	0.7	0.7	0	0

The total number of students is 300, 150 males and 150 females. The preferences from 1-10 are the same as in Table 4.
(source: Education and Occupation, Vol.1, 1987)

These two tables show that differences exist between girls and boys in their options of ideal work, but these are not very significant. At least more than one-third of the girl students choose scientific work as their ideal work. These figures do not tally with the distribution of girl students in technical and vocational education. Why? This question will be answered in the next section.

From the discussion of the first problem, we can see that the majority of girls do not like to take feminine specialities, and it also indicates that the girls' technical and vocational schools do not meet the needs of girls to some extent.

Drop-out rates

The second problem is that there is a huge drop in numbers of girls in the period between enrolment and graduation in vocational education. Table 6 shows how big this drop in number has been within the past four years.

Table 6. *Girls' drop-out rates in Vocational Education*

year	enrolment	graduation	drop-out
1984	317,826	89,562	228,264
1985	417,924	136,228	281,696
1986	425,647	195,083	230,564
1987	1.004,483	309,431	695,652

(source: the Educational Committee of China 1988)

This table reveals two phenomena. One is that both the enrolment number and graduation number of girl students has increased. The other is that the number of drop-outs is bigger than that of graduates. Before we analyze the causes of these two problems, one thing that needs to be mentioned is that the majority of the drop-outs come from rural areas.

Causes of the problems of girl students in technical and vocational education.

The process for girls to choose their specialities is very complicated. It is influenced by several factors: traditional ideals, force of habit and customs, early school education, parental pressure, economic reform, opportunity of employment, personal interests, reputation of the specialities and conditions of future work. It is impossible to deal with all these but several important ones should be noted here.

Traditional ideology

General speaking, any ideology is the reflection of the existing society but sometimes people's concepts cannot change along with social change and development.

In China, although the traditional patriarchal ideology has been challenged and criticized since liberation, it still exists. It has strong influences on the present uneven distribution of girls in specialities of technical and vocational education.

According to traditional ideology, men are superior to women. Such an ideology not only holds strong among the older generation but also among the younger one. Therefore, girls are undervalued by some employers, teachers and even their parents. In girls' early education, they are taught to follow women's traditional patterns of education and occupation by their parents and teachers, directly and indirectly.

Furthermore, because of the traditional patriarchal ideology it is generally accepted in the countryside that girls are of little value to their families and are considered temporary members. In the patrilocal marriage system, girls are usually married out of their parents' families or even out of their villages and become members or labourers in their husbands' families or villages. Boys, however, are seen as the permanent members of their families and their parents prefer to send them to schools, but are reluctant to educationally support their daughters when they need their daughters' help in home sideline production, such as blanket making, mushroom growing, or housework, because they see investment in the education of their daughters as a waste of time and money or as contributions to the families into which they will eventually marry.

Economic and educational reforms

The growing development of economic reforms has caused a new perspective in different fields in China such as industry, agriculture and education. Society has advanced to some extent and people's living standards are higher.

However, this reform brings some problems at the same time. For example, people's ideology and values are changing. At first people see the increase of educational quality as a great value because higher education certificates can make it easier for them to get promotion and a good job, which benefits their income and social status. However, the value is strictly economical, not academic as yet.

Within the recent three years, the development of commercial economy has greatly changed young people's values. And the hot wave of doing business has influenced the whole country, especially young people. The fast increase of prices in recent years is another factor.

Working together with these two factors is the educational reform, which no longer takes the whole responsibility of the students' future employment. Some students from the countryside or small towns want to have good jobs in big cities after they graduate, but now the country has changed the assignment policy. All these have made some young people give up schooling and take up business or make money by other means to increase their own economic position.

Labour opportunities

The economic reform has exerted a tremendous influence on the employment situation of women. The implementation of the responsibility and contract systems has taken the place of the 'iron rice bowl' system. (The 'iron rice bowl' is an employment system which has been practised for more than 20 years in China. It means that once people are employed in a state enterprise, they will get regular payment no matter whether they work or not. Workers who worked hard got the same payment as those who worked less or did not work at all. There was no competition and no wage difference among the workers. That is why people called this system the 'iron rice bowl'. However, the guaranteed wages led to the lack of incentive to work hard and do a good job.) Some contracting units refuse to recruit women or employ as few as possible since they have been considered inefficient workers.

At a workers exchange meeting held in April 1987 in Beijing, 80-90% of the enterprises expressed their need for only male employers. The same thing has been happening in some institutions of higher learning, and scientific units. Therefore, many girl students fear they will not find a job or they will lose their economic position. The limitation of girls' labour opportunities also affects girls' educational choice. When they find scarce opportunities for entering modern branches in the labour market, surely they are bound to continue to opt for a pattern of education which is relevant to a working career as pre-school teachers, nurses, etc. Thus they have to adjust their aspirations and options and they dare not choose the specialities which are considered as boys' occupations. This probably has a great impact on the restriction of occupational choice of girl students when they enter technical and vocational schools. For example, I have visited two vocational schools in Beijing, where I learned from two headmasters that over 80% of the girls do not like to be nurses or primary school teachers, but still the speciality of pre-school education is completely occupied by girls and 90% of the students in the primary education speciality are girls. Girl students in boy-oriented specialities have great difficulties finding jobs compared with girls in feminine specialities. Even the headmasters admitted that employment opportunities affect girls' choices of specialities in technical and vocational education.

The model of employment

In the labour market, the majority of women's jobs have always been derived from the extended female roles of teaching children, preparing food and sewing. Only a small number of women have entered the occupations which are considered male specific.

For instance, women outnumber men in occupations dealing with textile, clothing, pre-school education, food production. These occupations are considered to be suitable work for women in China.

Surely the present distribution of women in the labour market also affects girls' options in technical and vocational education. It is natural for girls to select a pattern of education relevant to a working career, and the existing occupational distribution of men and women in the labour market indicates that there are few opportunities for women to enter occupations other than those traditionally considered appropriate for them. Thus a continuous cycle is created.

In addition to these factors, what we should keep in mind is that psychological, sociological and possibly biological factors also contribute to the present situation of girls in technical/vocational education. But these factors are not as important as those discussed before.

Conclusions and recommendations

I have discussed the development of national technical and vocational education and the achievements and problems concerning girls in middle technical and vocational education. Having examined the present situation of girls in technical/vocational education at the national level, I find that girls outnumber boys in certain specialities, and that girls have more access to technical/vocational education. The accessibility of technical and vocational education for girls helps them to find jobs and improve their competitive value and position in the labour market.

What is more important is that the development of girls' technical and vocational schools has provided favourable conditions for more girls to master professional knowledge and to raise their opportunities for employment. Moreover, these schools have also played an active part in raising women's social position and in further establishing the equality between men and women.

However, as a new attempt to develop girls' competitive abilities, to reform the educational structure and to raise educational quality, girls' technical/vocational education has its limitations. For example, these feminine specialities, admittedly, benefits girls finding jobs, but they emphasize women's traditional roles. As girls in these schools are offered feminine specialities such as health, sewing, pre-school education, beauty service, etc., large number of girls will enter low-status jobs which are looked down upon by males. If truth be known, such schools are not very helpful for girls to get rid of their sense of inferiority and to compete with boys. If this situation continues, it will be difficult for women to acquire a strong position in the labour market.

In fact, this kind of vocational education reinforces traditional attitudes towards women and patriarchal values, and keep women in subordinate social positions. Girls attending such schools will be trapped into low-skilled jobs when they graduate. Therefore, I would say that the girls' technical and vocational schools have not broken the traditional attitudes towards women.

Compared with girls' vocational schools, general technical and vocational education is more helpful; girls in general technical/vocational education have more options for specialities when they are enroled. More girls can enter the specialities that used to be occupied by boys. This situation is useful for raising the girls' motivation to compete with boys, and for them to get rid of their sense of inferiority. Therefore, in general technical/vocational education, although girls outnumber boys in some specialities, many girls have taken specialities that will enable them to enter the modern branches of the labour market when they graduate.

Undoubtedly, promoting access of girls to the girls' and general technical and vocational schools is a good way to raise girls' educational level and to enhance their opportunities in the competitive labour market today. However, if the educational opportunities offered to girls in general are greatly inferior to those enjoyed by boys, the positive relationship between technical/vocational education and employment may be neutralized or even reversed. To maintain the positive role of technical/vocational education for girls, some strategies should be attempted.

The fact that girls have access to technical and vocational education which enhances their options and life prospects enables me to make the following statements.

1. Good policies are a basic element since they are usually considered codes of conduct in China. Therefore, it is necessary for the government to work out specific policies and concrete measures to ensure girls' positions in the specialities which will lead to modern branches in the labour market. Of course it is not nearly enough only to make policies because the present occupational distribution and employment opportunities of both sexes in the labour market are generally considered as the main influences on girls' options and participation in education. The government and related departments should also make clear and specific policies to eliminate the present sex-related inequalities in the labour market and guarantee equal employment rights for women through legislation. Equality between men and women is stipulated by the Constitution but if there are no concrete measures to ensure its implementation, it will remain an equality on paper.
2. Ideological education is an important implementation of new policies and measures and will help to solve girls' problems in technical/vocational education, since it can at least wipe out the barriers of traditional patriarchal ideology. To do this, the government and the Women's Federation should make all of society feel concerned for women's education and create extensive opportunities for girls to enter more specialities strictly considered to be for boys.

   To reach this goal, the mass media should educate people, knowing that the progress and development of a society depends on all its citizens. Women make up half of China's population. Through their work-force China's four modernizations can be realized.

   Meanwhile, girls must be made aware that their educational options and opportunities are quite important for their future employment and their status. On the basis of such an understanding the government and the Women's Federation should try to help form a common inclination towards creating opportunities for girls' technical and vocational education, especially for entrance into modern branches, which enjoy a high social status.
3. In addition, reforms of the specialities currently available in the girls' technical and vocational schools should be effected as soon as possible. Reality in China tells one that technical and vocational education in modern branches throws more light on the place given to girls in a society and at the same time determines their future status. Therefore,

the girls' technical/vocational schools should provide more specialities which lead them to modern branches in the labour market.

4. With a consideration of the past and present situation, to renew social concepts and ideology is one of the chief ways to help girls enjoy more extensive participation in technical and vocational education. In China, the traditional patriarchal ideology not only bound females' feet and hands but also fettered people's minds and made female citizens suffer much on their way to becoming intellectuals and technicians.

But eliminating the deep-rooted ideology cannot be done only by academic departments, nor in a single day. The government and the Women's Federation should educate all society and generate public opinion in favour of those concepts that will help girls to have equal educational rights. Without the full support of society, it is impossible for the academic departments to change girls' present situations. Women's Federation should encourage female citizens to raise their own educational level, eliminate traditional patriarchal thinking and overcome their sense of inferiority. Furthermore, girls should know that the state has endowed them with equal rights in education through educational law, but that in order for them to exercise such a right they should make good use of every possibility to raise their educational level. This, in turn, will benefit society, and raise women's quality equality with men in their practical achievements after they graduate.

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21.

Coping for Survival: Focus on the Participants in the Underground Economy of Manila

José C. Gatchalian
Miflora M. Gatchalian

'Underground' employment in a country suffering from grave unemployment problems, appears to be the only means for coping with a deepening economic crisis. The informal sector offers the poor and unemployed a real opportunity to provide their families with the minimal living requirements.

This article presents the findings of a survey conducted among 1000 'underground' entrepreneurs in Metro Manila in 1986. It describes the types of 'business' they are involved in, the work environments, their socio-economic characteristics, problems and expectations.

The authors further discuss positive and negative aspects and implications of the underground economy. Effective policy measures are urgently required to deal with the situation.

Significance of the study

The political events of the 1980's have plunged the Philippines into a deep socio-economic crisis from which it is just starting to recover. The dimensions of the crisis are reflected in official statistical data displaying soaring unemployment levels, dwindling incomes and an increasing proportion of the population living below established poverty lines. This bleak predicament was especially prominent in urban centres where the population and industrial/commercial establishments are concentrated.

However, what was expected to be an explosive situation arising from massive unemployment and widespread poverty was tempered by the existence of an informal sector that provided a coping mechanism which was resorted to by the most economically distressed sector of the urban economy.

Background of the study

This study attempts to fill in some existing information gaps about the informal or 'underground' economy in the Filipino setting through an exploratory descriptive approach. In the past many formal and scientific investigations on the nature and scope of this sector have generated various concepts, terminologies and approaches towards examining the phenomenon. Local studies referred to it as the 'informal sector' (ILO 1974; Jurado & Castro 1976; Canlas 1980; Jurado & Ferrer 1976; King 1984). The literature from international sources included formal theoretical models which variously termed it as the 'secondary market' (Piore 1968, 1969, 1970); the 'bazaar economy' (Geertz 1963); and the 'small-scale sector' (McGee 1971; Roberts 1979). The more popular and recent articles on the phenomenon describe it as the 'black', 'underground', 'clandestine' economy (*Newsweek*, 1986).

These studies underscored the dualistic development of labour markets in certain economies. There is, on the one hand, the formal structured sector which is characterized by high wages, good working conditions, job security and opportunities for advancement. And then there is the unstructured, informal sector characterized by relatively low wages, poor working conditions, variability in employment, and very limited opportunity for advancement.

Objectives

Broadly speaking, the present study aimed to determine the nature, consequences and prospects of underground employment in four cities of Metro Manila. It hoped to evolve recommendations and possible programmes of action designed to uplift the status and/or alleviate the lot of those involved in this sector. Specifically, the study attempted to:

1. describe the socio-demographic profile of the participants in underground employment in selected cities;
2. determine the type(s) of activities that accommodate underground employment;
3. identify the reason(s) for the emergency and observed growth of underground employment;
4. describe the condition(s) under which underground employment exists or operates;
5. identify possible consequences of underground employment relative to income generation, savings potentials, capital accumulation, and the participants' health and public safety; and
6. to determine and record the perception(s) of those engaged in underground employment in terms of their socio-economic concerns in the future. This includes their personal aspirations, familial goals, as well as their views on future government involvement in their current activities.

While the primary intention was to conduct a comprehensive investigation of the various aspects of underground employment, quite a few factors have imposed limitations towards achieving this end.

Limitations

Firstly, the study focuses specifically on 'underground urban employment' which normally covers the 'labour' or 'manpower' aspect of the underground economy. Defining the scope in this manner automatically excludes the complex interrelationships of 'non-labour' variables in the underground urban economy.

Secondly, since it is commonly accepted that underground employment is an outcome of the urbanization process in developing economies, it was therefore deemed appropriate to delimit the research area to four cities of Metro Manila, the country's chief metropolitan area, for the research environment of the study.

Time and budgetary constraints prevented the coverage of the study to be expanded to other urban centres as a way of comparing, counter-checking and reinforcing accumulated data and of setting up a sampling frame which could lend greater scientific rigor to the framework.

Research methodology

A combined multi-stage/purposive/convenience/stratified simple random sampling was utilized to eventually select the sample units. The sampling frame would be the selected 'business sector' in the three most densely populated districts in each of the four cities of Metro Manila. The sample size of 1000 respondents was allocated in the selected areas based on their respective populations size. The whole process of data collection covered the period May-July 1986.

Results and discussion

Nature of respondents

Respondents in the survey were persons drawn from those described as underground employees plying the commercial sites and streets of the four major cities in Metro Manila. The sample size of 1000 respondents represented the cities of Manila with 453 respondents; Pasay with 247; Caloocan with 150, and Quezon also with 150.

As far as demographic characteristics are concerned, the total of 1000 respondents consisted of 467 males and 533 females. The majority of the respondents belonged to the labour force population in the age range of 15-64. Of this batch, 67% belong to the marriageable and fertile ages of 15-39 years. In the said age group, there were fewer women (31.7%) than men (36.6%). Among the men 43.5% were single and 50.5% were married; among the women only 22.5% were single, but 57% were married and 20% were either widowed or separated (see Figure 1).

The majority of the respondents were migrants (63.9%) to the National Capital Region (NCR, including the Metro Manila area). The others had actually been born and remained in this region. Other than the National Capital Region (36.1%), regions 1, 5 and 8 were the regions of birth of 34.7% of the respondents. Reasons for migration were generally socio-economic in nature, the desire 'to find a job' being foremost. Probably because of the nature of their work, most of the respondents spoke the Filipino vernacular *tagalog* at home and at work.

The observed demographic characteristics tend to show that the population of those engaged in underground employment is an active group composed of more women than men. Among the men, the proportion of single individuals was much higher than among the women. The latter tended to belong to the older age group who were either married, widowed or separated. Considering these characteristics, plus the reasons for migration and/or decision to stay at the NCR, it seems reasonable to conclude that the economic activities undertaken by the respondents are basically a means to cope with the lack of available employment. Perhaps for most, this is their only means to make a living in these times of depression.

As for their socio-economic background, in general more than two-thirds of the respondents belonged to household sizes of three to five and six to eight members (see Figure 2). A considerable proportion (10.6%) lived in households with nine or more members (see Table 1). The houses were mostly made of wood (54.4%) while some (40.4%) reported living in a house made of concrete and wood (see Figure 3). About 49.3% of these houses were one-room affairs, where toilet and bath facilities may not have been available.

In terms of facilities, 71.1% are known to avail of the regular power supply of the Manila Electric Company as a source of electricity, while 12.5% use illegal connections, or the *kabit* system. For water facilities, 61.6% avail of the regular supply from the Metropolitan Waterworks and Sewerage System, while 9% use the deep well or *pozo* and 29.4% find their water supply from other sources.

Figure 1. *Comparative proportion of male and female respondents by marital status*

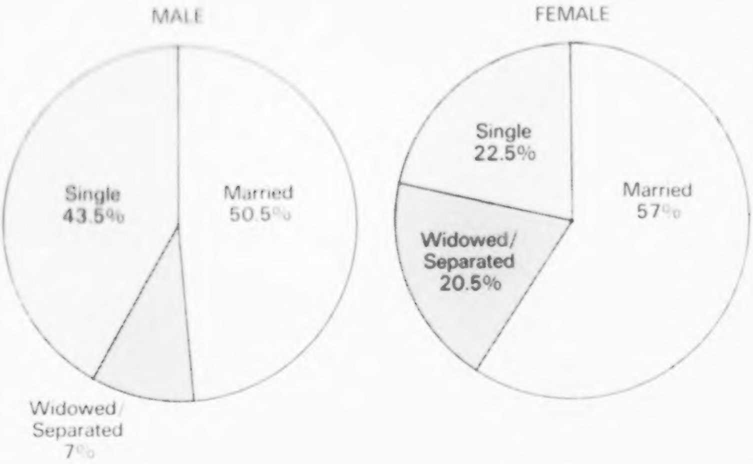


Table 1. *Respondents' household size by marital status and by sex*

	MARITAL STATUS						
HOUSEHOLD SIZE	Single			Ever Married			TOTAL
	Male	Female	Total	Male	Female	Total	
1	24 11.8	6 5.0	30 9.3	8 3.0	10 2.4	18 2.6	48 4.8
2	12 5.9	9 7.5	21 6.5	26 9.8	24 5.8	50 7.4	71 7.1
3-5	62 30.5	32 26.7	94 29.1	144 54.6	195 47.3	339 50.2	433 43.3
6-8	84 41.4	52 43.3	136 42.1	65 24.6	141 34.1	206 30.4	342 34.2
9-	21 10.3	21 17.5	42 13.0	21 8.0	43 10.4	64 9.4	106 10.6
Total % per status	100.0	100.0	100.0	100.0	100.0	100.0	
Total Freq. & %	203 20.3	120 12.0	264 26.4	413 41.3	677 67.7	1,000 100.0	

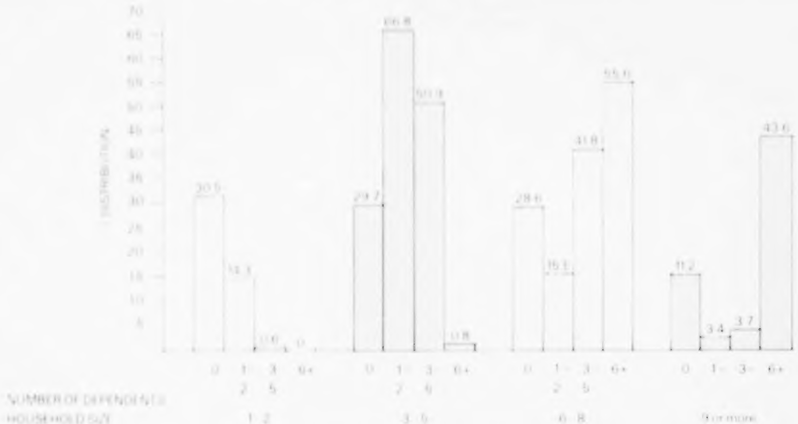


Figure 2. *Household size and number of dependents living or not living in the household.*

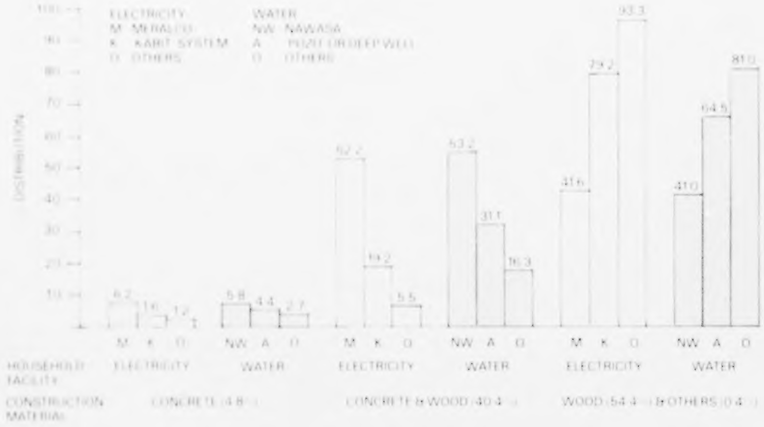


Figure 3. *Household construction material and source of electricity and water.*

Among the scarce appliances or furniture available in the household the following were mentioned: stove fuelled by gas, kerosene or wood, electric fan, black and white television set. However, the majority of the respondents did not even own a stove of any sort. Only 42.5% owned at least a gas stove (cf. Table 2). More than two-thirds did not even have native mats to sleep on. But the majority among them (57.6%) had electric fans while others (43.8%) even had black and white television sets.

Under these sub-standard conditions of living, the household expenditures too, tend to show a very poorly provided for family. While it follows that expenses rise as household size increases, the amount of expenditure observed is low considering the household size. While about 50.8% reported spending 50.00 Philippine *pesos* or more daily for their household, the rest spent much less than this amount. In fact, for a household size of three to five the prevailing daily expenditure was between 30-59 *pesos* (see Figure 4).

This description of the respondents' households and its belongings provides a vivid picture of the living circumstances of this impoverished group of people. They live in sub-standard conditions, barely having enough facilities to keep body and soul together. Daily expenditures tend to show that whatever may be earned for the day will be spent mainly on basic needs - perhaps only on food that may not even be adequate to feed all.

The description of the characteristics of the respondents themselves may provide a ground for action relative to their future prospects, if any. Whether these are bright or dim, however, it must be recalled that all the respondents belonged to the labour force population, the age group being 15-64 years. More than two-thirds of them were married. Among those married, a considerable proportion of women were single parents, having been either widowed or separated. It is also interesting to point out that although smaller in number, there were married men engaged in underground employment. This would imply that many men who could be the family's sole supporter are not able to find gainful and regular employment, and have to resort to these activities in order to survive.

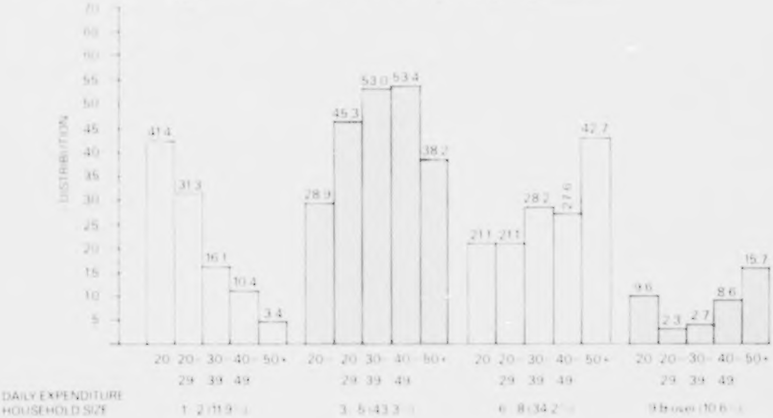
More than four-fifths of all the married women lived in households of three or more members. Of these, one-fourth actually has more than six households occupants. It is also noteworthy to see that among the single respondents, almost two-thirds live in households with more than six members.

Considering the household sizes and marital status of respondents, this could be indicative of the high level of dependency. Some respondents even reported that their dependents included persons not living with them. In

Table 2. *Type of appliances/furniture in households of respondents*

Appliances	Have		Do not Have		Total	
	Freq.	%	Freq.	%	Freq.	%
Stove						
Gas	425	42.5	575	57.5	1,000	100.0
Kerosene	312	31.2	688	68.8	1,000	100.0
Wood	284	28.4	716	71.6	1,000	100.0
Banig bed	295	29.5	705	70.5	1,000	100.0
Electric fan	576	57.6	424	42.4	1,000	100.0
Black & White T.V.	438	43.8	562	56.2	1,000	100.0

Figure 4. *Household size by daily expenditure*



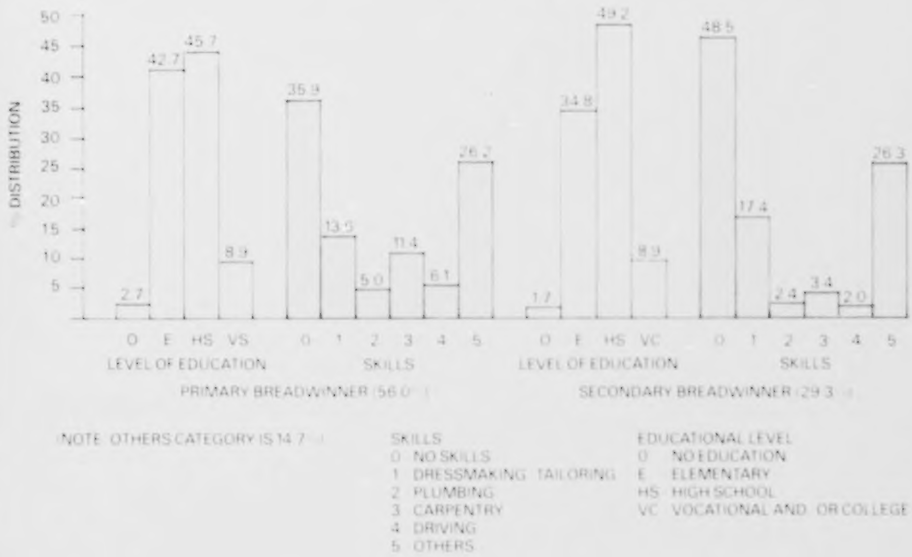
general, the households with three to five members reported having dependents within the range of one to two (66.8%) and three to five (50.9%). For the large household size, it appeared as if all the members were dependent mainly on the respondent.

The educational level of the respondents showed that the greatest proportion have had at least high school education. There were even some who were college students or graduates. Only a very small proportion (2.1%) were reported as having no education. An analysis of the respondents' skills revealed that about 47.6% did not have any formal skill at all. About 30% reported varied skills, and skills in the area of needle work, construction, electrical repair work, etc. Skills reported include: dressmaking, tailoring, plumbing, carpentry, and driving.

More than half of the respondents reported themselves as the primary breadwinners (see Figure 5). About one-third were secondary breadwinners, while all others irregularly contributed small, varying amounts to the household's financial needs. It is to be noted that half of the primary breadwinners had only elementary education or less. On the other hand, more than two-thirds of the primary breadwinners had skills of some sort, while almost fifty percent of the secondary ones had no skills at all.

The typical respondent was at the economically productive age trying to provide for the basic needs of his or her household. While he may have had some education, he probably did not have the opportunity to develop any utilizable and employable skill to enable him to improve his income and thereby his lot in life. Perhaps most of his time was spent in maximizing gains from his current economic activity.

Figure 5. *Extent of economic contribution by educational level and by skills.*



There seemed to be a great need among the participants in this informal sector, to at least develop some useful skills for self-improving opportunities. This may have been possible considering their educational level. However, since most of the respondents were either primary or secondary breadwinners, they could not have the time and the energy to work and at the same time engage in additional training towards the improvement of their current situation. Unless some form of intervention can be made to elevate their present socio-economic status, those in underground employment may be consigned to their present plight. And considering the present state of the economy and its future prospects, many more may be forced to join their present ranks.

Features of underground employment

Underground employment in Metro Manila is currently characterized by a predominance of street vending work concentrating in selling commodities which range from either cooked or unprocessed food to non-food items. The rest of the activities are in service and repair, construction and maintenance, transport and production-related activities. Considering the degree of spatial mobility, the majority are either semi-static or ambulant in nature.

With regard to their work history, the study revealed that a significant proportion of the respondents have been engaged in some similar type of work before. Changes, if any, were mainly in terms of the kind of merchandise sold. It is significant that a large proportion of the respondents had been employed before they participated in underground employment.

The reasons for choosing their current primary work revolve around three major responses: respondents viewing their current primary work as temporary until they can find a better job; those stating that it is a relatively easy way to earn a living; and those who say that it is either a job the respondent is familiar with or it is the only job he/she can do.

The majority of those engaged in underground employment activities work for seven days a week, and from ten to twelve hours a day, which is longer than the hours and days spent by formally employed workers.

Practically no capital, be it initial or working, is required, the work can yield a daily income that can approximately meet daily household expenditures. However, it does not enable the workers to save for future capital accumulation. The work set-up likewise involves little or no overhead expenses. The majority of the respondents were operating either without work assistants, or with work assistants who were mostly unpaid relatives.

The problems they encountered were varied, although these were mainly due to harassment by police, insufficient capital, stiff competition, a general slump in business, absence of a permanent workplace, and exposure to physical risks. To the overwhelming majority, any notion of the government and its services to this sector is minimal, if not nil, since they have neither availed themselves of any form of government assistance, nor do they know of any current government programme for their benefit.

With little or no capital required and minimal overhead expenses, combined with easy educational requirements (unlike those of their counterparts in the formal sector), underground employment guarantees a relative accessibility to the labour market, especially for those who are not highly educated and/or possess few or no skills at all.

On the other hand, the status of being in an unregistered, untaxed and unrecorded business means being vulnerable to harassment and government sanctions. In turn, this type of approach creates among the informal sector an alienating and negative concept of government.

Consequences of underground employment

Since they are beyond the scope and reach of government regulations, underground workers generally suffer from appalling working conditions. In most cases, there are no formal agreements or contracts of employment, therefore no fixed working hours, wages or other terms. In the rare cases that there are, working hours are quite flexible and, presumably, little observed. Sanctions can be nil or inoperable in case of any violation or non-observance of agreements. In those few cases where a situation of employment exists, relations are invariably onerous with the employer unilaterally determining wage levels and working hours.

The study also observed that women, child workers and other disadvantaged groups appear to make up the bulk of underground employees. This may be due to the nature of this type of economic activity, which has hardly any formal and rigid qualification requirements.

Terms and conditions or work in underground employment are flexible, albeit sub-standard, and are not subject to strict enforcement and regulation. The many laws and regulations concerning the employment of women and minors need not be religiously observed, such as working hours, minimum wages, maternity leave benefits for women, and apprenticeship rules for children. But considering their status and qualifications, such groups as women and child workers can hardly find regular and gainful employment. The underground economy offers a last, and perhaps only, recourse for earning a living at present.

The absence of monitoring and regulations in this sector exposes the workers to health and safety risks attendant to their work. In particular, street vendors are exposed to the elements, especially if belonging to the ambulant category. This is most disturbing considering that a significant proportion of street hawkers are young. The nature of their work compels them to chase after jeeps, buses and other motorized conveyances for fast sales.

The stench of decaying garbage pervades the *talipapa* where many vendors and hawkers cluster. There is no system of garbage disposal, flies abound, and the muddy surroundings add up to unsanitary conditions that are suffered by both seller and buyer.

Other dangers are inherent to such situations. Petty crime and cheating are everyday occurrences, pockets are slashed, handbags snatched and occasionally violent encounters ensue. The inconveniences to the public at large are innumerable to list, but would include traffic hazards, obstructions to thoroughfares, blocked entrances and exits of dwellings, fire hazards, and other undesirable consequences that are inherent to the operation of the underground economy.

Prospects for underground employment

The study clearly underscored the contributions of the participants in underground employment to the community. First of all, their presence in the business sites and streets of the cities offering their wares and services provided their only means for coping with the economic crisis. These people would otherwise have been destitute and hopeless. Instead, they developed the means to support themselves as well as their families and other members of the household. Through their income generating activities they have, in fact, cushioned the impact of poverty in an economy which can no longer support them.

Through underground employment, families began to entertain hopes and aspirations for their members. Most of the respondents dream of one day being uplifted from their present status, through the educational advancement of their children. They entertain hopes of attaining security of having their own houses and perhaps enjoying health and prosperity. Their capability to peddle their goods and services may one day prove to have been the mechanism for the uplift of their families.

Underground employment enables the participants to contribute to economic stability, if not growth, among the urban poor. It responds directly to the needs of those who make up the large impoverished sector of the urban society. The goods and services provided by the underground employees directly assist the poor in the community. The ambulant vendors allow direct access to their low cost goods and services to consumers who could not afford them if they had to turn to regular stores and concerns. In effect, though highly informal, they have somehow formed a network which makes its own economic contribution to society.

In general, the poorest of the poor in the urban sectors have revealed the will to face economic adversity. Their drive for self-employment, their desire for self-improvement and their instinctive quest for survival are important elements of economic recovery. This group of people deserves considerable attention and concerted efforts to guide them towards a better life. Perhaps they can even serve as the base from which could be generated more and more self-reliant people who will propel the cause of small-scale entrepreneurship.

Conclusions and recommendations

Areas for further studies

At the completion of the present study, it seems that more questions than answers have been generated. This is due to the fact that the limited time frame (six months) and coverage (four cities of Metro Manila) of the research barely scratched the surface of the phenomenon of underground employment in the Philippines.

Since previous studies on non-formal employment tended to concentrate on selected areas in Metro Manila, future research efforts may survey the extent of non-formal employment in the country. Such studies might look into how Filipinos have resorted to underground employment as a survival mechanism in these economically depressed circumstances.

Providing quantitative estimates of the impact or contribution of the underground economy to the total gross national product of the country may be another important area of research. There is an unmistakable, though relative, importance in the underground economy as a source of income and employment, as has been the experience from the Philippines economic crisis of the 1980's.

Some policy and action proposals

Studies on the urban poor invariably end up with policy recommendations. McGee (1971) suggests, for instance, some alternative policies for the Third World urban poor. Government policies, according to McGee, should recognize the positive aspects of petty trade such as the production and distribution of fresh food, which the hawkers often perform efficiently and cheaply. The observation, likewise, applies to the Philippines, and the recommendation as well.

Non-government organizations have programme thrusts and on-going activities that are worth considering in the search for viable and feasible alternative courses of action for the benefit of the urban poor. The example of the Manila Community Services Inc. (MCSI) seems appropriate, particularly with its Self-Employment Programme (SELP) and its community-based social credit programme.

Apart from providing social credit and technical assistance, MCSI's package of services also offers entrepreneurship development and training, supportive social services and other schemes that aim to benefit micro-entrepreneurs belonging mostly to the poorest sector of the urban poor.

The efficacy of measures initiated by NGOs such as the MCSI lead us to suggest that these entities and their activities be encouraged and supported. Rather than restrictive government policies and bureaucratic regulations, those private initiatives should be emphasized as they conform with the policy prescriptions of McGee and others.

Nevertheless, the urban authorities ought not to adopt a strict 'hands-off' policy, especially with regard to the maintenance of public order and health and safety standards. These are positive measures that could be turned to the advantage of the poorest of the urban poor in the long run.

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22.

Transfers of Technology and Skill Training in the Informal Sector in the North-West Frontier Province of Pakistan

Leon Tomesen

This article presents a case study of a project aimed at upgrading the small scale industry of Pakistan's North-West Frontier Province (NWFP). Three categories of enterprises formed the target group: automotive workshops, welding and sheet in metal workshops and light engineering workshops. The transfer of technical skills took place by mobile training workshops travelling all over the province. The technical skills were complemented with training in other non-productive skills, such as administration and management. The article presents the policies and strategies of the project as well as the achievements to date. More research is needed to derive measures of efficiency and to highlight factors influencing effectiveness of skill and technology transfer.

This article intends to honour both the request of presenting a case study and the directive to write the article from a broad perspective, contributing to a more general frame of reference for subsequent discussions. To realize this the following format was chosen. First a general description of the project is given. In the next three sections for each of the three main and interrelated activities of the project the more specific background is described, followed by a description of the policy of intervention chosen by the project. The project achievements in each of these activities are summarized and the other sections are concluded with subjects for further consideration.

Project description

Background and objectives

Small-scale industry forms an important segment of the manufacturing sector in Pakistan. It accounts for 27.2% of the manufacturing sector and 4.8 % of the gross national product. The entire small-scale industry is in the private sector, spread both in small and big towns and spilling over to the villages. It is basically labour intensive and employs more than 75% of the industrial labour force.

It was against this background that the Pakistani and the Netherlands government signed, in 1984, an agreement for the execution of an industrial development project in the North-West Frontier Province (NWFP) in Pakistan. The project, named Pak Holland Metal Project (PHMP), consisted of a preparation period of nine months while its actual execution started in January 1986.

The long term objectives of the project were to assist in an accelerated and balanced industrialization process in the province and to contribute towards the decentralized development of small-scale industries. The project would focus on metal-related production as a step towards the development of agriculture, transport, construction and other industry.

The attainment of these objectives would help to improve the general welfare of the people and lead to the creation of employment opportunities in the province. The project would reach these objectives by an integrated package of services for the small-scale industries, consisting, among others, of extension services, skill training, and the provision of credit through a revolving fund.

Characterization of small scale industries

Before discussing the strategy of intervention and the details of the project activities, first the situation prevalent in the typical small workshop group is summarized.

The project distinguishes three categories of target enterprises: automotive workshops, welding and sheet metal workshops and light engineering workshops. These workshops consist mainly of repair and maintenance workshops. Very few are engaged in such activities as the manufacture of agricultural implements and machine parts for larger manufacturers. These products are mostly imported from the Punjab province in Pakistan. Whenever manufacturing plays a role, the enterprises make simple products which require simple tools and equipment and which require short-term operator training.

The most noteworthy point concerning all three types of workshops is the predominance of the automobile and transport related activities. This transport dominated workshop pattern clearly reflects the importance of the transport section in the area.

Due to the poor educational base in Pakistan in general, and in NWFP in particular, most entrepreneurs and workers are semi-literate and have learned their skills through an apprenticeship training system exclusively. This lack of development of human capital has resulted in low regard for the acquisition and transfer of technology and engineering capabilities.

Consequently many workshops suffer from obsolete production processes, uneconomic output, low productivity, high wastage of material and inferior product design. Such production can hardly form the basis for sustained growth of the industry.

A remarkably small proportion of workshops invests anything in their development. The capabilities for small innovations are usually lacking and there appears to exist a high aversion to change. On the other hand, a survey undertaken by the project revealed that a very healthy proportion (on average over 30%) of the units are unsatisfied with their present performance and have plans for improvement.

As a result of strong individualism, the transfer of technology between enterprises and even within enterprises is very limited. Entrepreneurs hardly interact with each other in ways that might increase the efficiency and productivity of using resources. And this while studies of the World Bank reveal that interaction between firms is exactly one of the most stimulating factors in industrial development and technology transfer.

Most of the enterprises served by the project are very small. No less than 86% of the units have an area of less than 20 m^2.

Another typical characteristic is the high turn over of labour. The barriers for starting one's own workshop are very low, due to the generally very low technological standards. Workers leave employment before sufficient technology has been transferred to them and consequently start their own businesses on an even weaker basis than their former employer.

Strategy of intervention

To remedy the unfavourable conditions mentioned before, the strategy adopted by the project was to first focus its attention predominantly on technical skill training. To reach as many as possible of the target group of more than 3000 enterprises, a mobile training formula was chosen. Three mobile training workshops, one for each of the automotive trade, the welding and sheet metal trade, and the light engineering trade are travelling all over the province to deliver crash courses for technical skill training at the doorstep of enterprises.

In the course of the project execution a strong trust relationship between the project staff and small-scale industries developed. As a consequence of this trust, the project gained more insight in the problems and potentials of these industries in the numerous districts of the Province. Simultaneously the demand from entrepreneurs for the acquisition and transfer of technologies and related services continued to grow and became more urgent. As a result of this development the project decided to gradually shift the emphasis of its activities from skill training to technology transfer through extension services. Problems were analyzed and possible solutions were generated. The results of past programmes in and outside Pakistan were widely used to design a final programme of integrated services.

Since the process of technology and capability acquisition and transfer is not yet subject to consolidated scientific knowledge, the project had to map its own way to find the most efficient and effective solutions.

The project staff realized that apart from technology, also production, administrative and other non-technical capabilities are needed to run an industrial firm. Among others, the development of inventive and entrepreneurial capabilities proved to be essential to the further growth of small-scale industries. This type of development typically occurs through a combination of culture, training and learning, and productive work.

To increase the awareness and understanding among the project staff of the project objectives and tasks, at the initial stage bi-monthly team-building meetings were held with all Pakistani and Netherlands senior project officers.

This intensive programme has indeed performed the function of bridging cultural gaps and did increase the insights in the meaning of cross-cultural management. Also special training sessions on leadership, motivation, synergetic teamwork, participation and conflict management were organized. This first exercise in combining culture, education and productive work resulted in a high level of commitment of the project staff, a growing awareness of being a member of a team, and clear agreements and arrangements for the project execution.

Transfer of technology

Background

Before describing the small-scale industries and their need for technology, it is relevant to first sketch a picture of the general science and technology environment in Pakistan.

At independence in 1947, Pakistan received a very meagre inheritance in terms of scientific and technological institutions and manpower. The national science and technology systems have, till today, many problems. Some of the most important problems are the lack of resources, the lack of planning, isolation from the users of technology, and an educational system that does not inculcate curiosity for research nor a spirit of enquiry.

The nation has over 60 research institutions and nearly 200 experimental stations. Their research is mainly in the hands of persons without research degrees: for example, in the 34 provincial government research institutions, the percentage of Ph.D.s amongst their researchers is only 2,5. The total number of Ph.D.s in all governmental research institutions in the nation is less than 400.

Project policies

a. Extension services

As described above, small scale industries are quite a diversified target group. Their complex problems make simple production prescriptions rather useless.

The careful identification of local needs and conditions is therefore crucial for the execution of extension services. The failure to identify local constraints is equally important as the assessment of local needs. In NWFP a number of typical constraints exist in the fields of skilled labour, the supply of raw material, the attitude towards co-operation, energy and capital. On the basis of such a technology and training need assessment, the project adopted the following policies for the execution of its service activities.

The project concentrates in the first place on in-depth, involved extension service aimed at activities which might have a sustained effect on increasing the productivity of the assisted enterprises. Whenever possible and desirable, the services of local or foreign consultants may be used to assist in the extension services. At this phase of industrial development in the province, costs for external consultancies will not be charged to the entrepreneurs, but will be paid by the project as a promotion activity.

b. Prototype development

A workshop for the adaptation, manufacturing and testing of prototypes has been equipped by the project on the premises of the co-ordination office. On the basis of identified needs, simple machines with a good market potential and possibilities to diversify production in the target industries are imported, adapted to local conditions and, if feasible, taken in production by an interested entrepreneur.

c. Industrial technology centre

An experimental industrial technology centre has been set up in the Hazara district to serve as a liaison between small industries in this district and the project co-ordination office in Peshawar. This centre is meant to stimulate the informal trust between extension officer and entrepreneurs that is essential for success. A system of monitoring and quality control by the co-ordination office goes hand in hand with the basic autonomy of the technology centre.

Activities to be undertaken by the industrial technology centre include the provision of technological information and advisory services, the identification of the need for technical and managerial training, assistance in project preparation and the processing of loan cases, and the monitoring and follow-up of the impact of project interventions. Through a programme of balanced and frequent visits by different types of experts, the enterprises will have easy and periodical access to all services available in the project.

The establishment of such an industrial technology centre is at this stage a low profile experimental operation. A minimum of capital investment is spent on the exercise. A rented building is used, situated as close as possible to the target group of entrepreneurs. The industrial technology centre is only equipped with a chair, a telephone, a typewriter, and a telefax.

Achievements

A total of more than 1000 workshops have to a greater or lesser extent benefited from the project activities in this respect. An ILO/UNDP/DGIS[1] thematic evaluation mission phrased the achievements of the project as follows:

> *"Although it is impossible to assign quantitative contributions to it, it is equally impossible to doubt that such a competent centre as Pak Holland Metal has not/is not contributing to the development of industries. They have introduced new products and designs now in common use, they have helped open new markets, they have introduced and demonstrated new equipment, technologies and materials, and they have trained people in all these innovations. This project has almost certainly trained or set an example to many workers in the private sector and thus realized a multiplier effect, even if this cannot be quantitatively traced."*

For the modernization of existing workshops and the set-up of new workshops, the project has started to publish small booklets on 'standard' workshop lay-outs. These booklets are freely distributed to interested and potential entrepreneurs. The booklets include equipment lists, a first introduction to cost-benefit analysis, possible types of products to be manufactured and details about workers, both in terms of the numbers required and the desired educational background and experience.

A last interesting observation is that building on the skills and experience which entrepreneurs get in one round of intervention, they sometimes move progressively, without much assistance of the project, to higher and more specific levels. A striking example in this respect is that of an entrepreneur who, through relatively much technical assistance from the project, was introduced to the design and production process of a fuel efficient wood stove made of sheet metal. He has recently taken a locally designed kerosene stove in production, without any intervention from the project, thus dramatically increasing his turnover and profits.

Subjects for further consideration

An adequate base-line survey of the target group needs to be undertaken before defining in detail the functions and delivery system for interventions in small-scale industries.

A practical method to assess the economic, social and cultural benefits and the costs of different choices of technology should be developed.

The reasons for varying performance in the different functions, and the extent to which performance is dependent on the type of intervention and the profile of entrepreneurs and workers, should be further investigated.

To increase the understanding why some things work and others do not, and in order to keep records to preserve such information, data should be gathered and interpreted of attempted adaptations and modifications in production processes, management methods and other aspects of running an enterprise.

Situation-specific criteria to be considered for the choice of technology for small-scale industries should be developed. Related capabilities that are needed to use the chosen technology effectively, not only now, but also later, should be identified.

More insight should be gained in the various possibilities that different technologies might open for acquiring added capabilities and for modifying technology to increase productivity.

More applied research and development effort, as well as trial and error experiments are needed for the modification or improvement of existing technology (minor innovation).

Skill Training

Background

After its independence Pakistan, like most newly emerging nations, focused its vocational training efforts predominantly on urban, modern sector employment. It was implicitly assumed that the primary skills practised in rural and small urban workshops could be passed on from father to son or from *ustad* (master) to worker through on-the-job traditional methods of transfer of technology. The growing recognition that economic development is not possible without the application of the full range of motivations and aspirations of people was thus ignored.

It is claimed that one of the causes of the difference in development between Pakistan and, for instance, Japan and Singapore is the ability of the latter to successfully develop programmes based upon technology and skilled human resources. In Pakistan very little is done on human resource development. The result is that Pakistan is faced with a very serious shortage of an intermediate category of technical manpower in every sector. The number of institutions in the country imparting this type and level of training is small, and their standards deplorably low.

The provision of skills development opportunities in the rural areas is a particular important prerequisite for alleviating poverty. The delivery of crash training courses to assist entrepreneurs and workers in the acquisition of relevant skills with which they can improve their prospects for income generation is therefore another essential activity of the project.

Since the target group for skill training is characterized by a high percentage of illiteracy, it should be realized that there are definite limits to the level of technical knowledge that an illiterate person can acquire by aptitude and dexterity alone. In general the literate person will have a different attitude towards the learning process than an illiterate one, besides possessing a greater capability to absorb new information.

Project policies

A careful assessment of training needs is considered highly essential. Prior to any training activity, a training need assessment is undertaken in the area concerned. Prior to the actual training round, mobile teams introduce the possibilities for training to eligible entrepreneurs by means of demonstration in the mobile units.

On the basis of the training need assessment and the observations made during the demonstration, a selection of enterprises and trainees is made and a tailor-made training programme is prepared. The actual basic training of trainees is then done by Pakistani instructors exclusively.

The policy in the field of skill training is to cover as many workshops as possible. As much as possible one *ustad* from each interested workshop, or a second worker of the same skill level, will be selected for skill training.

Different from the normal schooling system, the project target group is more in need of remedial training in specific, and most often limited topics, rather than in systematic and prolonged teaching along sequential subject matter lines.

Curricula and syllabi for the basic training courses have been prepared in the form of learning elements, derived form the Modules of Employable Skills approach developed by the ILO. Most learning elements are supported by instructor guides which have been developed to assist the instructors in their independent teaching of the respective learning elements. These learning elements are adapted on a continuous basis to match with the needs and wishes of trainees.

The duration of the skill training courses initially was not fixed. In consultation with entrepreneurs a duration of two weeks was chosen. On the basis of feedback after trial rounds, it became apparent that the opportunity costs of a prolonged absence of workers from the workshop were too high. The period was therefore later reduced to one week.

There are now indications that this duration might not be sufficient to complete all training packages. The re-introduction of longer training periods in all, or in a number of training modules, is presently being considered.

Achievements

The data base kept by the project already provides, at any time, most of the statistics on the achievements of the project in the field of training. To complement these data with objective primary data, a formulation mission for a second project undertook an independent field-survey, covering both engineering and socio-economic aspects, from January 6-11, 1988. A sample of 62 workshops out of the total population of all workshops covered by the project made up the survey. The survey, complemented with secondary data from the project data base, revealed the following results.

The projects has imparted training to 788 trainees from 740 different workshops. Since the drop-out rate was 7% and the failure rate 5%, 88 percent of the trainees was awarded a certificate at the end of their training.

A series of courses in the three trades have been realized. These courses have been delivered in accordance with the potential which mobile workshops possess. This has resulted in a wide, comprehensive and speedy coverage of the NWFP. This is in accordance with the stated original objective "to contribute to the general improvement of the living conditions of the people in the region" and "to promote employment opportunities for as many people as can possibly be reached in an efficient manner".

A majority (almost 60 percent) of the trainees interviewed felt they had learned a great deal in the training programme. On the question of the relevance of the training the evidence is some what mixed. 35% felt that it was highly relevant, while 12% felt it was irrelevant. A majority (53%) of the trainees however felt that it was somewhat relevant.

An overwhelming majority of the trainees expressed their satisfaction with the instructors. Questions related to their techniques of teaching, knowledge of the subjects, and enthusiasm, all invariably led to the same positive response from the trainees. Almost 90% of the trainees expressed a high degree of satisfaction and not a single person expressed total dissatisfaction with the instructors.

The impact of training - or any other form of newly acquired knowledge or skill - can only be felt if the recently acquired knowledge is utilized. If, however, there are constraints in the utilization of the technologies, or if the institutional environment does not provide sufficient incentives for their use, the impact on society will be minimal. This will be true in spite of the mastery of technologies by individual trainees. An attempt was made to determine the extent of use of the new technologies and, secondly, to identify the major constraints that are responsible for the lower rate of utilization. The results of this exercise are that less than 40% of the trainees are utilizing the skills a lot, another 40% are using the skills to some extent, while a little over 20% are not yet utilizing the acquired skills for various reasons.

The main factor inhibiting the utilization of technology and techniques are the non-availability of tools (58%) and the lack of demand (28%). Other minor factors relate to the inappropriate content and the inability or unwillingness to change habits.

In the absence of accounts of the workshops for both the period prior to and after the project, the evaluation team had to resort to a simple method of asking the interviewer directly about the effect of the training on chosen indicators. The indicative results of this impact evaluation exercise lead to the following conclusions.

Firstly, the key impact of the training has been in terms of higher quality of service and saving of time due to the adoption of more efficient working methods. Only 11% of the respondents felt that they had not been aware of an increase in quality due to the training, while a majority (53%) felt their quality of service had increased a great deal. The impact upon time savings, though not as dramatic, is still highly positive. 34% felt that their time savings were substantial, while 36% of the respondents felt that they experienced none at all.

Secondly, training has had little measurable impact upon raising the sales, decreasing the costs or increasing profits of the workshops. In 76% of the cases there was no change in costs. This percentage was 64% in the case of sales and 67% in the case of increased profits.

Subjects for further consideration

In the absence in workshops of accounting documents or other written records of financial and economic performance, there is a clear need for another method by which to measure economic indicators like added volume, profitability and employment record.

Reliable data on the regional patterns of development, the influence of the seasons on market demand, migration trends and employment figures are essential inputs for the further development of the project activities. Since these data are not available, further research and survey activities in these fields are desirable.

The ideal - and scientifically correct - procedure for determining the impact of the project on the magnitude of the increase in quantifiable indicators such as income, profits, leisure etc., would be to have data on these indicators both prior to and after the start of the project, and to undertake a comparison of the two. Then an adjustment could be made for other exogenous factors such as changes in the macro-economic environment or seasonal effects to isolate the true effect of the training. A research plan for such a time series of measurements is presently being developed.

Data base and resource centre

Background

Innovation without adequate research and development is bound to result in a waste of resources. As may be clear from the previous section, an industrial development project like the PHMP cannot do without action research which is associated with ongoing activities and whereby 'constant' feedback data are collected.

Project policies

The main emphasis of the research and survey activities in the project have been on the need assessment of training and technology and impact analysis.

The initial idea of utilizing and strengthening local social-economic and technical research and survey capacity has been proven to be unrealistic and unfeasible. The project therefore set up its own data collection and processing facilities. Most statistical and other data collected over the years by the project have been computerized.

Likewise, the computerisation of the technical information system is considered important, specially with the establishment of more de-centralized industrial technology centres being planned.

Achievements

The thematic evaluation mission of ILO/UNDP/DGIS particularly praised the project for its monitoring efforts. The mission concluded:

> *"Monitoring results of past programmes (in Pakistan or outside) appear to be widespread and useful in designing new programmes. The Dutch (notably in the Pak Holland Metal Project) make a special effort to self-monitoring within projects, assisted by an outside permanent advisory group."*

The research and survey activities of the project have rendered the following tangible results:

A team composed of four investigators and one coder, were intensively trained by the project, have carried out a Technology and Training Need Assessment Survey in 3099 workshops. The information collected includes the type and quantity of products made, services rendered, educational profile of the workers, types of machines and tools used, and the availability and supply of raw materials. This information is the major requirement for designing the training and extension activities of the project.

To assist the entrepreneurs and the project staff in the modernization of plants and the set-up of new plants, a comprehensive set of technology files has been created in the project resource centre. These technology files contain technical and financial data on most relevant products and processes used in the metal and automotive engineering fields.

The project has published a Tool and Equipment Directory, including information on brand names, suppliers, technical specifications, quality and prices of tools and equipment available in Pakistan.

A comprehensive market study of hand tools in Pakistan has been undertaken at the initiative of the project. Another market study undertaken by the project concerns the location and quality of Pakistani raw material suppliers for metal workshops.

Subjects for further consideration

The following categories of research are recommended for further consideration:

Confirmation of the following statements:
- Commercial banks are unwilling to provide risk capital for small entrepreneurs;
- The World Bank Small-Scale Industry loans are not disbursed to the target group of small-scale enterprises in NWFP;
- Access to training for the poor rural population is far less easy than for the rich urban population;
- Small enterprises are using out-dated technology.

Any outcomes of such an independent study will not only serve to confirm experience but can be used to support arguments for change.

Evaluation of new openings for change:
- Assessment of the effectiveness and efficiency of the mobile formula for delivering tailor-made technical training courses for entrepreneurs and workers;
- Evaluation of the quality and effectiveness of learning materials developed for illiterates;
- Evaluation of the entrepreneurial training programmes.

Independent judgement:
- Is the fact that most entrepreneurs are using rented premises a barrier to the development of new small firms or the growth of existing firms?
- Is the non-availability of three-phase power supply for industrial units a serious barrier for their development?

This type of judgement may be important to remove uncertainty as to facts, especially for political purposes and in case of conflicting views.

New knowledge about a desirable situation:
- Market survey to establish the size, nature and source of company purchases for sub-contracting purposes;
- Market survey to establish the need for equipment and machines needed in village industries.

New ideas for evaluation:

- Systematic collection of ideas and practices related to small-scale industry development at the local, national or international level;
- Surveying what measures are being taken, by whom, and with what success, to assist small enterprises;
- Inter-regional comparison of the success of small-scale industries intervention programmes.

Evaluating existing activities:

- The efficiency and effectiveness of services provided by the project ought to be evaluated on a continuous basis. Through research it is possible to determine measures of efficiency and to highlight factors influencing effectiveness. Such measures may be used in training staff and in restructuring consultancy services;
- Determination of the correlation between literacy on the one hand and capital investment by category, earnings, adoption of new techniques, etc. on the other.

Note

1. DGIS: Directorate General for International Co-operation, Ministry of Foreign Affairs, The Netherlands.

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23.
Education for Productive Life

Vichai Tunsiri and Kla Somtrakool

In 1982 the Thai Supreme Command Quarters in co-operation with the Non-Formal Education Department started a vocational training and development project near the troubled Thai-Kampuchean border with the aim to promote people's income, secure occupation, uplift their morale and by doing so, keep the people from migrating. In the first year of its operation the project concentrated on the transfer of a number of technical skills through courses organized at the training centre. Evaluation results showed that many participants made use of the acquired skills but most of them lacked the necessary basic life skills to turn the skills into a profitable business. It also became apparent that especially the young participants, after completing a course, went to urban centres hoping to find a job. These findings led to a modification of the project approach and a restructuring of its activities. Technical courses were to include non-technical subjects such as management, marketing and planning for self-employment, and courses were organized with and for the communities in their villages.

This paper was written on the basis of the experiences from fieldwork organized by the Non-formal Education Department (NFED) through the initiation of the Vocational Training and Development Centre for the Thai people in the Thai-Kampuchean borders (VTDC). In more than five years of operational research at this centre, the NFED gained much knowledge from which we would like to share ideas and experiences with all concerned and interested.

It was in 1982 when the Supreme Command Quarters, in co-operation with the NFED, started the project of the VTDC. It is a centre established to help provide education and vocational training and development to the Thai people living along the border areas of three provinces: Prachinburi, Chanthaburi, and Trat. Most of these people encounter health problems and lack a plot of land to earn a living, due to the fact that they have been continuously affected by the fighting in Kampuchea and the incessant flow of great numbers of refugees from the Indochinese countries into Thailand. On account of the distressing conditions suffered by the villagers along the border areas of the country, the government has considered immediate measures to correct the situation, especially concerning the economic, social and cultural problems, as well as the people's morale and the country's security. In order to bring back peace and welfare to the areas, the VTDC was set up in Prachinburi Province, with mobile units detached from the centre to carry out the effort in Chanthaburi and Trat Provinces. The aims were to promote people's income, to secure occupation and quality of life, as well as to keep the people in their own country.

The early stage of programme development

Since the purpose and rationale to establish this VTDC were different from that of other centres under the responsibility of the NFE Department (seventy-two Provincial NFE Centres and five Regional NFE Centres), the structure and working model of this centre differed as well. The administrative personnel and staff of VTDC therefore had to use their knowledge and abilities in managing and developing an efficient educational model which was to be most relevant to the need and the condition of the target community.

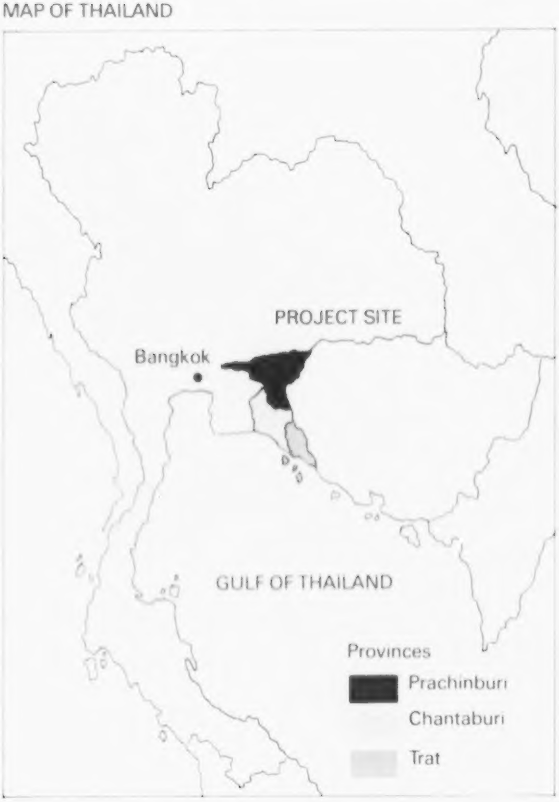
The Vocational Training and Development Centre (VTDC) is located on the Suwannasorn Road in an area of 370 rai (148 acres) and is approximately 50 kilometres away from the border (see Figure 1). Since most of the people in this area are migrants from Kampuchea and from the North-West, their cultural backgrounds and languages are mixed with those of the Thai, Laotians and Kampucheans. The people mostly suffer from a low economic condition due to the lack of educational opportunities and vocational development activities. Most of the people earn their living from agricultural work.

At the beginning of its operation, the VTDC in co-operation with the Central Non-formal Education Regional Centre undertook a survey of the areas, where problems and needs of the target communities in the three provinces were identified. The results of the survey were used as information for the planning of the future programmes and training activities of the VTDC. It was found from the survey that most of the people in these areas earned a living in rice farming, maize and cassava plantation, and animal husbandry. A minority of the people lived on home industries such as weaving and basketry.

In their occupations, the people lacked the skills needed for self-reliance and they still had to rely on the services in town areas far away from their community. They had little access to news and up-to-date information significant for their daily lives. Besides, the whole community was deprived in terms of geographical location, lacking a proper water supply. This contributed to poor sanitation and health problems. Few governmental services, especially education and social services, were received by the people due to the remoteness of the community. Most people were unable to read and write.

In agriculture, the people still practised the skills transferred by their ancestors. They lacked new technological skills in crop plantation, and this was found to be one of the most significant obstacles in the vocational development of the community.

Figure 1. *The project site.*


MAP OF THAILAND
PROJECT SITE
Bangkok
GULF OF THAILAND
Provinces
Prachinburi
Chantaburi
Trat

The vocational training programmes provided by the VTDC in the first year of its operation were copied from the system and programmes organized in the Mobile Trade Training School and the Provincial Non-formal Education Centre under the Non-formal Education Department. The programmes were short training courses ranging from 100-300 hours in various fields: engine repair, radio repair, electrical wiring, barbering, hair-dressing, dressmaking, food preservation, typing and accounting, etc. These courses were open to interested persons who were able to read and write. The training model was focused on particular vocations, containing both theoretical knowledge and operational skills. The learners had to participate in at least 80% of the training duration, after which they would be tested on their basic skills, in order to evaluate their learning abilities. The training courses were provided both within and outside the Centre. The former ones were provided to learners living nearby or at the Centre for the whole period of the courses, while the latter ones were in the form of mobile units to be sent out from the Centre into the villages. Both training programmes were aimed at preparing the learners for employment and self-employment at home.

The results found in the follow-up and evaluation of the first group of graduates after one year of completion revealed that 33.48% of them were able to apply their skills in their jobs, while 27.14% of them were engaged in self-employed activities, and 27% could use their skills in daily life. When the learners were asked how confident they felt in applying their new knowledge and skills in developing their occupation, the answers varied from one course to the next. This was due to the fact that each course was different in terms of training methods. In some courses (such as barbering, typing and agriculture), the training methods were not too complicated and the learners had the opportunity to practise their skills during the learning period. In these courses the learners felt that they had gained much confidence in using their skills productively. In contrast, those courses where the training and learning methods were very complicated and the learners were in need of managerial skills (such as in radio repair, engine repair, welding, dressmaking and hairdressing), the graduates stated that they had less confidence in performing their skills. For those who were self-employed and were running their own small businesses, it was found that they needed to learn more basic life skills to organize their jobs productively.

These basic life skills, for example planning, management and marketing, were formerly not included in the training methods/curricula. Most courses stressed only direct instrumental vocational skills, while the learners also lacked managerial skills. Besides, it was found that the courses, in which the training was done in a classroom with inflexible curricula, did not provide the opportunity for householders or older people to attend the courses. In addition, the learning/training methods being applied were found to be similar to those of formal education and inappropriate for the adult learners. Therefore most of the learners in these courses were young people in the age group of 14-22 years.

To summarize the results of the follow-up and evaluation of the programmes organized by the VTDC in the first year of its operation, it was found that most graduates were able to use their skills in finding employment in smaller towns as well as in Bangkok and in the Middle-East countries. Very few of them remained working in their own communities. This caused the problem of migration of youths who left home to look for jobs in towns, while the community itself was in need of security, services and self-employment activities to be organized by these same graduate youths, so that the community would not have to rely on the services in towns.

The development stage

A comparison with other developmental projects which aimed at developing educational systems for improving the quality of life of rural people demonstrated that these projects tried to concentrate on development through self-help and self-reliance. A project like DELSILIFE, for example, which was one of the Department's developmental projects, was found to stress on development through people's participation and their abilities in solving their own problems, securing needed skills, and organizing their own learning/development activities. The VTDC has presently adopted the DELSILIFE model to organize the training process of the Centre, whereby the basic life skills are taught or integrated into every vocational training course. The VTDC has now changed its structure and the process of training by developing new programmes which are more relevant to the people's lives and their culture. In so doing, the following criteria have been taken into consideration:

1. The training methods and model should be relevant to the culture of each target community.
2. The training model should be most appropriate to the particular age group of the target learners.
3. The curricula should be developed so as to enable the learners to apply their knowledge and skills in their day-to-day lives.

4. In skills training, which aims at developing people's self-employment, basic life skills should be taught in addition to vertical instrumental skills.
5. The training system should concentrate on the direct situation of the target community.
6. The learners should decide to select their own vocation and they should be able to find appropriate jobs yielding a better income.
7. After the training process is completed, activities to promote job creation and the follow-up process should be carried out continuously.
8. In some vocational training, the trainees may already have basic skills but they may lack skills in marketing, designing, and others. In such cases there will be no need to provide skills training to the trainees; instead, they should be provided with guidance and counselling through the use of the appropriate learning media.
9. Employment development in the rural community (micro-planning) should involve the community base line data so that target goals and procedures can be identified.

Taking into consideration the concepts and criteria derived from the studies of other developmental projects, the VTDC has adapted its programmes and structures in order to be more appropriate to the needs and backgrounds of the people in the target border areas. To develop new curricula and structures the VTDC has considered the following concepts and guidelines (see Figure 2).

Figure 2. *Curriculum development*

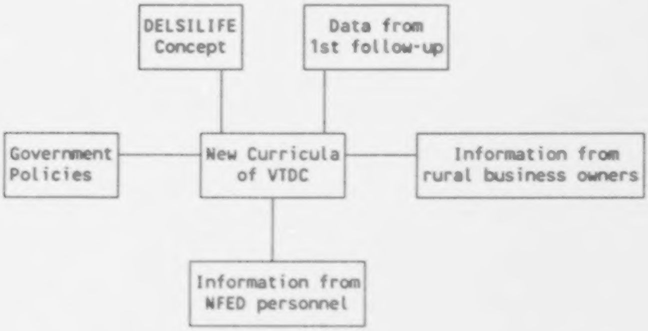
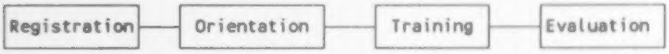
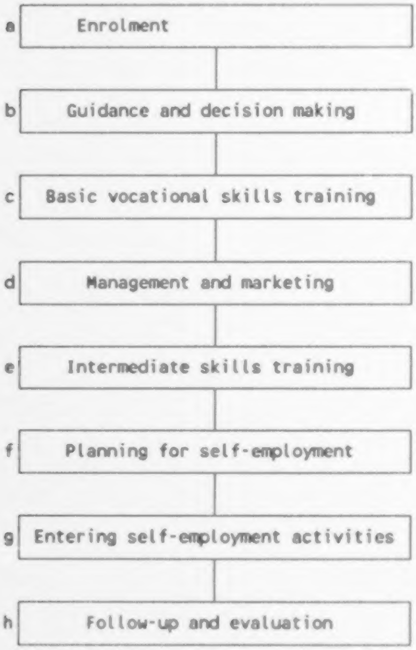

DELSILIFE Concept
Data from 1st follow-up
Government Policies
New Curricula of VTDC
Information from rural business owners
Information from NFED personnel

Figure 3. *Comparison between the former curricula and the new self-employment training curricula*

A: The former approach


Registration
Orientation
Training
Evaluation

B: The new approach


a Enrolment
b Guidance and decision making
c Basic vocational skills training
d Management and marketing
e Intermediate skills training
f Planning for self-employment
g Entering self-employment activities
h Follow-up and evaluation

The vocational short-course training curricula as formerly used in the VTDC had been derived from those of a technical college, which in 1960 were adapted from the vocational curricula used in the United States. These training curricula aimed at fields of vocations for industrial workers and business employees. Therefore, the curriculum structures only stressed vertical skills training, which was not appropriate to the group of self-employment learners. Besides, its contents failed to respond to the local needs. The VTDC, therefore, has considered to develop more appropriate curricula by inviting business owners in the rural areas, such as dressmakers and engine repair shop owners, to come for an interview and to help identify the learning contents as well as the application of each particular course.

After the appropriate contents were identified, the basic life skills such as marketing, management, and planning which were significant for self-employment, were included in the training procedures. Exactly how the old and the new curriculum are related to each other can be viewed in Figure 3.

a. *Enrolment*:

In the former curricula the trainees may register for any vocational course they want, but in the new curricula the applicants are registered only after guidance and orientation are completed.

b. *Guidance and decision making*:

The applicants spend at least one week gathering information regarding all courses. After they have been given guidance and counselling on their job opportunities, they can then decide to register for the particular courses.

c. *Basic vocational skills training*:

The trainees are trained in basic vocational skills for six weeks in order to introduce them to the basic knowledge and skills needed for employment.

d. *Management and marketing*:

Management and marketing are very significant to the trainees who are preparing themselves for self-employment. These skills, which are significant basic life skills, take up one week of training.

e. *Intermediate skills training*:

Approximately seven weeks of intermediate skills training are provided in order to strengthen more vocational operational skills as well as self-confidence among the trainees before they enter into the world of work.

f. *Planning for self-employment*:

Considering working opportunities starts one week before completing the training courses. The trainees are assigned to make their own workplans according to their self-employment selection.

g. *Undertaking elf-employment activities*:

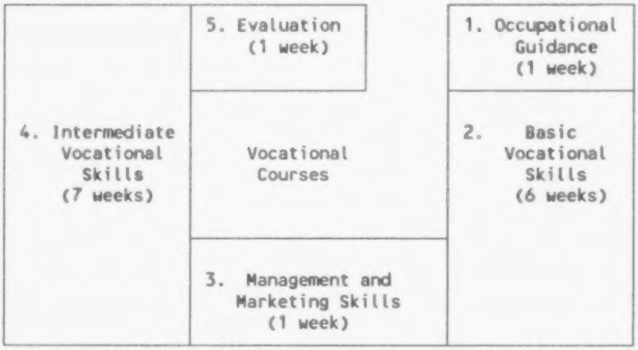
Before going back to their communities, the trainees are given the opportunity to loan money from the VTDC to start their own businesses as planned in advance.

h. *Follow-up and evaluation*:

After the graduates have started their own businesses in their communities, the VTDC staff will pay a visit to lend assistance and give suggestions. At the same time the follow-up and evaluation activities are undertaken by VTDC.

The entire process is summarized in Figure 4 below.

Figure 4. *Illustration of vocational training for self-employment*


5. Evaluation (1 week)
1. Occupational Guidance (1 week)
4. Intermediate Vocational Skills (7 weeks)
Vocational Courses
2. Basic Vocational Skills (6 weeks)
3. Management and Marketing Skills (1 week)

The other education activities for productive life

Besides the training courses for adults and teenagers provided within the VTDC, the Centre also organizes a community-based occupational development programme through the use of a micro-planning approach, which is also derived from the Delsilife approach. Through this approach, the villagers identify their own occupational needs. They also plan, operate, and evaluate their own developmental programmes which they think are in harmony with their own environment. Therefore, the concept of self-reliance and learners' participation are found to be highly applicable to all developmental programmes.

Besides the approaches discussed here, the VTDC also considers the use of other strategies/approaches for community skills development. These involve training through mass media, exhibits, study tours, folk plays and demonstration. These strategies have been proven appropriate by many community development workers, who have observed that there are quite a number of occupational training which can be done without formal education.

Conclusion

After five years of field operation at VTDC the Department of Non-formal Education has judged the new approach to be highly relevant and appropriate to the vocational short-course training programmes of the Department. Through this approach both the trainers and the trainees gain more confidence in participating in the programmes during which they get the opportunity to practise skills in a real work situation. This realistic approach, they feel, is better than the old and alienating approach.

The Department is presently planning to disseminate the VTDC's new approach, so that similar type of vocational training centres can be established in the years to come.

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Section IV

Educational Research and Networking

24.
Evaluation Research for Work-related Educational Programmes

Emiel Droogleever Fortuijn

This article presents a conceptual and typological scheme on evaluation research that enables to develop and select research designs appropriate to specific research questions with regard to work-related educational programmes. It distinguishes types of evaluation research according to the units to be evaluated, the purposes of evaluation, and the focus on the stages of action programmes. It specifies evaluation criteria and different quantitative and qualitative research strategies, with their strong and weak points. On the basis of a systematic review of various evaluation studies on work-related educational programmes some research priorities in this field are indicated.

Work-related educational programmes have been widespread across the world since youth unemployment was recognized as a major social problem in both industrialized and poor countries. School systems are accused of delivering young graduates without sufficient preparation for productive life, being too rigidly organized to adapt their programmes to the requirements of the labour market. Authorities other than educational have tried to fill the void with a broad array of non-formal educational programmes focusing on preparation for work in various settings (Droogleever Fortuijn, Hoppers & Morgan 1987). And even on the lower levels and in the lower streams of some school systems there are experiments with projects to make the curriculum 'more relevant', i.e. more oriented towards the world of work (Lauglo & Lillis 1988)

Most advocates of work-oriented programmes assume that the basic problem with unemployed youth is a qualitative discrepancy between the supply of and demand for qualified manpower: if the qualification level of school leavers could be improved, unemployment would disappear, or at least diminish considerably. Although one could have serious doubts about this assumption (Carnoy 1980), it is certainly true that more qualified youngsters generally have better labour market prospects than those without any work-related qualification, if only because they replace the less qualified in a step-wise process that finally pushes into unemployment those without any qualification. Work-related educational programmes seem to help if they give participants a comparative advantage, i.e. if they do not reach everybody. With this proviso, there is good reason to believe in the usefulness of this type of programme, even if it only marginally reduces unemployment rates.

There is, however, a more serious point to consider. Until recently, the expansion of work-related educational programmes - especially those of a non-formal character - has been rather supported by the belief in their healing effects as compared to traditional, school-based vocational education, than by exact knowledge on their short-term and long-term value. To be true, attempts have been made to evaluate some of their effects, by carrying out so called 'tracer studies'. But these are often poorly designed from a methodological point of view and focus on short-term effects (e.g. which percentage of participants is gainfully employed one year after finishing a training course). What training does to a work career, to social mobility, or even to unemployment rates is unknown. Also unknown is its cost-effectiveness, the intrinsic quality of training, the selectivity with regard to the participants and many other aspects of the training as an educational process and experience. Results in terms of labour market outcomes are not always positive, but why they fall short of high expectations is seldom clear, because the research design of these studies does not permit any conclusions on the educational process that trainees went through. What is desperately needed is a much more sophisticated approach to the evaluation of work-related educational programmes, paying attention to inputs, processes and outcomes.

This article attempts to provide a conceptual and typological scheme on evaluation research that enables to develop and select much more precise research designs. Evaluation research is variously conceived. The common notion is that some aspects of social reality are methodologically studied in order to arrive, on the basis of empirical evidence, at a judgement of the value of those aspects of reality. But on a more specific level of formulation divergence begins, divergence as to the 'what', the 'why' and the 'how', and 'by whom' of evaluation research.

First, four types of evaluation research are considered, with regard to the question of the social units that can be or should be evaluated. Then, several types of evaluation research are considered, from the point of view of its purpose and of the stages of action programmes. Next, the question of evaluation criteria is discussed and the research strategies to be used. A schematic synthesis is proposed in which the various distinctions are brought together. In the final section some conclusions are drawn with regard to the priorities that should be given within the evaluation of work-related educational programmes.

What should be evaluated?

Traditional conceptions of evaluation research refer to individuals or categories of individuals: their state of health, their educational attainments, or the degree of poverty may be evaluated. Doctors, teachers and welfare agency officials are just doing that, using their own professional expertise, sometimes assisted by laboratory analysts, test psychologists, or budget analysts (e.g. Bradfield & Moredock 1957).

At a later stage, evaluation research was applied to the valuation of projects or programmes, on the basis of a measurement of their effects on people who are related to the programme as their clients or subjects. Programme or project evaluation is still the most common type of evaluation research. Most handbooks on the subject take for granted that the subject matter of evaluation research are programmes, not individuals. One of the first handbooks on evaluation research defines it as the:

> "*use of the scientific method for collecting data concerning the degree to which some specified activity achieves some desired effect*" (Suchman 1967: 31-32).

Other typical definitions are:

> "*The purpose of evaluation research is to measure the effects of a program against the goals it set out to accomplish as a means of contributing to subsequent decision making about the program and improving future programming*" (Weiss 1972: 4).

> "*An important function of most evaluations is answering the question, Does the combination of materials, activities, and administrative arrangements that constitute this program seem to lead to the achievement of its objectives?*" (King et.al. 1987: 9).

A third type of evaluation research is precluded in the interesting shift from Weiss's 'program' to King's 'combination of materials, activities and administrative arrangements that constitute this program'. Programmes generally are carried out by permanent or ad-hoc organizations. If they are set up for the occasion, programme and organization are largely the same, but the more common case is that programmes are to be implemented by existing organizations, which had similar or other things to do before and continue to have similar or other tasks besides carrying out the new programme. In this case, it seems to be more appropriate to evaluate an organization in implementing a programme than to evaluate the programme itself.

Finally, there are authors who say that social systems are the phenomena to be evaluated. Kruijer, for instance, writes:

> *"Evaluation research is that form of scientific research, which has as its objective to assess the working of a social system. (...) The term working in this definition has a double meaning: on the one hand it indicates the effect (the outcome), on the other hand the functioning (the procedure, the way the effect is obtained"* (Kruijer 1969: 135,136).

Kruijer adds that evaluation research is generally applied to social systems guided by a set of policy decisions, but not necessarily so. According to him it is quite feasible (and useful) to evaluate a social system in which there is no central policy agency that determines how the system functions (e.g. a national system of health care, or a school system). Such a system has evolved in the course of time, without being planned and without being guided as a whole (although within the system many policy-making agencies may operate). Soumelis, although speaking about project evaluation, takes a similar position in stating that:

> *"... projects are formulated as a response to the needs of a system. In other words, a project is meaningless unless it serves as a means to the development of a system and the amelioration of its performance"* (Soumelis 1977: 25).

So we have four types of evaluation research, according to the social unit to be evaluated: (1) of individuals or categories of people, (2) of projects or programmes, (3) of institutions or organizations, and (4) of social systems or subsystems.

Why evaluation?

A second distinction refers to the purpose of evaluation research: why should it be done? Evaluation research is distinguished from other types of scientific research not by the methods it uses or the subject matter it studies, but by the intent to which it is done (Weiss 1972: 6).

There are several reasons why evaluation research is worth undertaking. The immediate reason is, of course, to get valid and reliable information on the extent to which a person, an action programme, an organization, or a social system is successful in realizing certain goals, or carrying out particular tasks. This information may be needed for the following reasons:

a. administrative check;
b. decision making concerning the continuation, expansion, contraction, transformation, replacement, or termination of organizations or action programmes;
c. legitimation of the existence of organizations or action programmes.

These are the main legitimate, real purposes of evaluation research. Various authors (e.g. Suchman 1967; Weiss 1972: 11-13) point out that the purpose of evaluation research is not always clear, that there may be a 'hidden agenda' with implicit purposes. Policy makers or programme managers may not be primarily interested in getting valid and reliable information on the functioning of an organization or the outcome of a programme, but in its continuity or destruction. Examples of pseudo evaluation research are:

a. fulfilling grant requirements;
b. promotion of public relations;
c. cover-up legitimation;
d. evasion from decision-making responsibilities;
e. wrecking procedures;
f. academization (enlarging the scope for academic reasons).

Each legitimate purpose emphasizes a specific aspect and has resulted in specific types of evaluation research. Conceiving the social unit to be evaluated as a policy-guided social system on its own (but forming part of a larger social system that constitutes its structured socio-political and cultural environment, and possibly consisting of smaller social units as subsystems), one may conventionally make a distinction between the inputs to that system (money, materials, people - both staff and clients - and ideas), the use of inputs, or through-puts (structural arrangements, activities, organizational procedures, decisions, interactions and negotiations), and outputs (effects, results, impact, performance, accomplishments and failures).

Evaluation research whose basic purpose is an administrative check, focuses on inputs and may be called accounting evaluation (Caro 1971: 3). Evaluation research of which the main purpose is to provide information for decision making, focuses on through-puts, the social process through which outputs are obtained, and is generally called formative or process evaluation. Evaluation research that aims at legitimation focuses on outputs and is called summative evaluation (Scriven 1967). It is meant to influence one specific decision of the provider of inputs: to continue or suspend them.

Accounting evaluation produces information (generally of a quantitative type) on the way inputs are in fact used (made available, applied, distributed) in the right amount, in the appropriate time and place according to previous planning and decision making. It assumes programme or organizational continuity and signals and corrects infractions. It primarily serves the bureaucrat.

Formative evaluation produces information (both quantitative and qualitative) on how an organization is developing, or an action programme is being implemented and fed back during the process, in order to (re)allocate resources, improve procedures and practices, foresee possible outcomes, to add or drop specific strategies and techniques, to experiment with or choose between alternative programmes, projects or activities, to expand the organization or to disseminate programmes, and to find out why and under what conditions certain strategies and techniques work or fail to work (Weiss 1972: 16-17). It serves primarily the programme developers, the planners and the middle-level policy makers, who are directly responsible for what is going on. It also assumes programme continuity, but is alert to changes that may be necessary to guarantee that continuity. As such it may have the characteristics of an action research.

Summative evaluation produces information (generally, but not necessarily, quantitative) on the effectiveness of an organization or programme. In principle, it takes place after a programme has been finished or has been instituted as a normal practice, or when it has been determined that fundamental decisions about the existence or tasks of an on-going organization should be taken. It serves primarily the top decision maker, but the interests of all people involved are at stake since the result of an output evaluation may be that an organization is dissolved or reorganized, or a programme is terminated.

Stages of action programmes as objects of evaluation research

Different types of evaluation research are distinguished according to the stage of an action programme to which it is pertinent. I use some distinctions made by Perkins (1977) and Soumelis (1977).

Soumelis parts from the idea that many types of social systems (like organizations) are decision-making, goal-seeking, or purposive systems, characterized by decision-making levels:

a. the policy or normative level, where purposes ("highest order goals, justifying the existence of an organization") and objectives ("preferred overall organizational states which, if achieved, will attain the purpose of the organization...") are formulated and chosen;
b. the strategic level, where goals ("particular patterns of action leading to the achievement of objectives") and programmes are formulated and chosen (strategic planning);
c. the tactical level, where targets are set and projects are developed (operational planning);
d. the administrative level, where projects are implemented.

On each level both planning and evaluation should take place, in order to obtain adequate goal realization (Soumelis 1977: 17-22).

Perkins takes as a frame of reference a government programme, a social intervention to solve or alleviate a social problem. In a social intervention programme the following stages can be distinguished:

a. identification of the social problem and labelling it as an issue of public policy;
b. formulation of legitimate objectives;
c. formulation of operational programme objectives;
d. establishment of a delivery system that oversees the distribution of resources and carries out the social intervention;
e. programme outcome consonant with the goals (Perkins 1977:642- 643).

Evaluation efforts can, according to Perkins, play an important role in the transition between the stages, since they help in the translation process from general and abstract goals to concrete and specific activities (Perkins 1977: 642-645).

The first type of evaluation research he calls strategic evaluation. It is directed toward understanding the dimensions of the social problem (origin, scope, susceptibility to intervention, implicit theories behind the idea that something should and could be done to the problem); in other words, it problematizes the goal statements and informs decision makers on the basic strategic approaches to be (or that should have been) chosen, thus linking the first and the second stage.

A second type of evaluation research deals with the issue of compliance and assesses adherence to legislative goals or programme objectives. It judges the 'orthodoxy' of the programme-project-activity links.

A third type of evaluation research refers to the logic of the programme design, the question whether the translations can be traced and the (intended) outcomes can be determined. It ascertains whether there are:

a. a sufficiently clear definition of problems, intended programme interventions, anticipated outcomes, measurable impacts to be expected;
b. an explicit statement of the (theoretical) assumptions linking expenditure to implementation, implementation to immediate outcome and immediate outcome to expected impact;
c. a clear organizational set-up and authority lines, taking into account the constraints under which all programme personnel have to work.

A fourth type of evaluation research focuses on the management aspect of the delivery system, the efficiency and effectiveness with which programme managers use the resources at their disposal. In this type of evaluation research it is generally assumed that objectives, facilities, financial resources and management policy are fixed elements, not to be subjected to scrutiny.

A fifth type refers to the intervention effect and aims to assess the relationships between aspects of the interventions and specified immediate outcomes, in terms of:

a. the effects of the whole system (e.g. do schools make a difference?);
b. the elements of this system (e.g. are training centre resources effectively used?); or
c. the parts of the programme (e.g. has the level of achievement of trainees improved? have their attitudes with regard to manual work changed?).

Evaluation of this type not only compares effects with inputs, but tries to assess as well whether measured effects can really be attributed to the programme intervention as a social process, or to specific aspects of it (reliability check). It may also pay attention to differential effects on subcategories of programme clients (e.g. boys vs. girls; trainees in carpentry vs. those in electricity; urban vs. rural), in order to locate weak points, specific situational constraints, or non-results.

A sixth and final type of evaluation research is the one that focuses on the total impact of the social intervention, comparing net outcomes with programme goals (e.g. are trainees getting work more easily than those who did not participate in the training programme, or those who attended a regular vocational school?).

A comprehensive evaluation research, of course, includes all types. But in general practice most evaluations are more limited in scope and include one or two of these types. Strategic evaluation is relatively rare, programme goals are seldomly objects of evaluation. Neither are process evaluations normal practice, since they are very time-consuming and expensive. Unfortunately, the general assumption behind impact measurement, that a social intervention is implemented as it was planned, is in most cases mistaken - and therefore inadequate. Another disadvantage of this most common type of evaluation research is that whenever results are negative, it gives no clues whatsoever as to the causes. For policy-making purposes, formative evaluation is a 'must'.

Summing up, we may distinguish the following types of evaluation research, according to its main focus:

- Evaluation of programme inputs:
  1. Strategic evaluation (normative and strategic level);
  2. Compliance evaluation (strategic, tactical and administrative level).
- Evaluation of programme through-puts:
  3. Evaluation of programme design (strategic and tactical level);
  4. Evaluation of programme management (tactical and administrative level);
  5. Evaluation of intervention effects (tactical and administrative level).
- Evaluation of programme outputs:
  6. Evaluation of impact (administrative level).

Evaluation criteria

Many authors have paid attention to the question of the criteria or yardsticks with which the results of action programmes can be measured. Suchman (1967) and Soumelis (1977) have attempted to formulate an exhaustive classification of criteria. Suchman mentions the following criteria:

a. Effort, the quality and quantity of resources and activities employed in an action programme. It is a yardstick for the measurement of programme inputs. Its use assumes that specific activities and uses of resources will lead to the desired outcome. Effort measurement has two dimensions: (1) capacity for effort (available time, manpower, materials and money); (2) the effort itself (number of activities and/or capital spent in a certain amount of time).
   Effort evaluation may give positive results, while the output evaluation may be negative, simply because the theory behind the choice of programme activities was wrong.

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b. Performance or effectivity, a measurement of outputs in terms of formulated goals.
c. Adequacy, a measurement of performance in terms of total needs. An index of adequacy might be the degree of effectiveness multiplied by the number of people involved in an action programme as its clients. Very effective programmes involving few people may be less adequate than rather ineffective programmes involving a large number of people. Intensity of programme activities generally is directly related to effectivity and inversely related to the number of clients to be reached.
d. Efficiency, a measurement in which a comparison is made between alternative programme strategies, in terms of time, money, qualification and number of personnel, and social acceptability of activities against results. The central question the evaluation study should answer is whether there are better opportunities for the use of available (generally scarce) resources.

Suchman's fifth criterion - process analysis - is not an evaluation criterion but a general research strategy, something of a different logical order.

Soumelis (1977: 25-36) distinguishes criteria to measure outputs of a social system (outside tests) and criteria to measure the operation and structure of a system (inside tests). Outside test criteria are:

a. Response time, the time required to produce a specific output (e.g. how much time is needed to train a skilled mechanic). This criterion can be expanded to mean response time (e.g. how many student-years does it take to have one secondary school graduate, taking into account that students repeat classes and drop out?).
b. Input-output ratio, by comparing number or quality of inputs with number or quality of outputs. This criterion assumes that there is a direct relationship between inputs and outputs (a thing much less true than management models take for granted). It is a measure of system efficiency, often confused with monetary efficiency (input costs - output value), which is better to be called the productivity (to be determined by cost-benefit measurement or rate of return measurement).
c. Correctness of output or effectiveness, by comparing outputs with (1) system goals, or (2) system needs. Either may be expressed in qualitative or in quantitative terms.
Inside test criteria are:
d. System performance, focusing on: (1) structural arrangements (coupling of structural components, decision-making structure, communication network, etc.); (2) system operations or processes.

Combining these two lists of criteria leads, with some additions, to the following classification of evaluation criteria:

A. Input criteria (effort measurement):
   1. Capacity (degree of availability of personal, material and organizational resources);
   2. Effort (degree of use of available resources).

B. Process criteria (efficiency measurement)
   3. Goal-directedness (degree to which activities are directed at the realization of goals, not put to other purposes);
   4. Effectiveness (valid links between activities and intended outcomes);
   5. Flexibility (degree of adaptation of programme implementation to local conditions and constraints, and to unforeseen opportunities);
   6. Efficiency (degree of absence of waste of resources).

C. Output criteria (measurement of the quality of implementation):
   7. Effectivity (comparison with goals);
   8. Adequacy (comparison with needs);
   9. Productivity (comparison of costs with benefits);
   10. Response time, or mean response time.

Research strategies

Generally, a broad distinction is made between qualitative and quantitative methodologies of data collection and analysis. In the earlier days of evaluation research output measurement with quantitative methods, according to the canons of the hypothetical-deductive research models of the natural sciences, was strongly recommended. There were attempts to construct or emulate an experimental design, with the testing of hypotheses and a focus on prediction, even in cases where goals were stated in qualitative terms (Weiss 1972).

As a reaction to forced quantification of evaluation criteria and lack of insight in the causes that produced meagre results or undesirable side effects, qualitative (holistic, inductive, naturalistic) research strategies were promoted as an alternative (and better) approach. Understanding the process of action programmes was emphasized, in terms of the perspectives of all parties involved, describing actual events, with due regard to variations on and deviations from planned courses of action (Fetterman 1986; Patton 1980).

There has been a growing appreciation of the merits and shortcomings of either approach, depending on the specific evaluation questions raised which (combination of) methods should be used (Patton 1980: 17-25; Perkins 1977).

Perkins presented a useful classification of evaluation research strategies (Perkins 1977: 647-653) according to three basic measurement dimensions which form a 'property space' (Barton 1964):

1. intensity of measurement (time span, frequency, depth);
2. degree of structure imposed on responses from informants on programmes to be evaluated;
3. degree of manipulation of antecedent conditions (congruency with the experimental research model).

He distinguishes ten types of evaluation strategies, which vary according to these three dimensions. Other authors make similar distinctions (Patton 1980: 49-85; Suchman 1967; Weiss 1972: 60-78), or specify parts of Perkins's classification (Levin 1988; Richards 1988). Taking these together, I come to the classification presented in Table 1. I indicate roughly their position in Perkins's property space, to which I add two traditional dimensions: validity and reliability. The plus and minus symbols indicate whether a specific research strategy is strong or weak on any of the five measurement characteristics.

The evaluation criteria and research strategies can now be combined with the different types of evaluation purposes, in order to demonstrate that different evaluation questions ask for different approaches in the set-up of an evaluation research. Table 2 presents the combinations, with a slightly reduced number of research strategies (for reasons of brevity).

Research priorities in the evaluation of work-related programmes

A review of 23 studies reporting on the evaluation of work-related educational programmes gives an indication of trends in evaluation research practice that are worth mentioning. These trends can be summarized as follows:

a. Most evaluation research takes individuals as the basic units to be evaluated, although they are generally presented as programme evaluations. System evaluation is rare.

Table 1. *Classification of evaluation research strategies according to their measurement properties*

EVALUATION RESEARCH STRATEGY	MEASUREMENT PROPERTY				
	1*	2*	3*	4*	5*
A. Non-experimental designs					
1. Input-output comparison					
a. in terms of system and client characteristics	v	v	-	v	v
b. in terms of costs (Levin 1988)					
(1) cost-benefit analysis	--	++	-	+	+
(2) cost effectiveness analysis	-	+	-	+	v
(3) cost-utility analysis	v	v	-	v	v
2. Output evaluation	v	v	--	v	v
a. compared with goals	v	-	--	v	v
b. compared with client needs	v	v	--	v	v
c. compared with non-programme groups	v	v	--	v	v
3. Naturalistic case study (Patton 1980)	++	--	--	-	++
4. Administrative monitoring (Richards 1988)	-	v	-	+	-
5. Professional review (Patton 1980)	v	-	--	--	v
6. Operations research	-	+	+	v	v
7. Goals-means analysis (Kruijer 1969)	v	+	--	+	v
B. Quasi-experimental designs					
8. Longitudinal designs	v	+	(+)	+	v
a. time series analysis	-	+	(+)	+	v
b. replication studies	v	+	(+)	+	v
c. panel studies	v	+	(+)	+	v
9. Statistical comparison between programme group(s) and non-programme group(s)	v	+	(+)	+	v
10. 'Patched-up' designs **)	v	+	+	+	v
C. Experimental designs					
11. Experimental-control group comparison	--	+	++	++	v

*) 1 = intensity of measurement; 2 = degree of response structuration; 3 = degree of manipulation of antecedent conditions; 4 = reliability; 5 = validity;
++ = very high; + = high; - = low; -- = very low; v = variable, according to the way the research design is elaborated; (+) = control afterwards, through statistical manipulation.

**) Not control in advance of sources of error likely to appear, but by adding specific controls during the research, one after the other, to rule out rival interpretations of causes of measured effects, apart from the programme that is evaluated (Weiss 1972: 72).

Table 2. *Usefulness of different research strategies and evaluation criteria for different evaluation purposes*

EVALUATION RESEARCH STRATEGY	EVALUATION PURPOSE					
	1*	2*	3*	4*	5*	6*
1. Input-output comparison **)					X	X
2. Cost-benefit analysis (1.b.1)					X	X
3. Cost effectiveness analysis (1.b.2)					X	X
4. Cost-utility analysis (1.b.3)					X	X
5. Output evaluation (2)					X	X
6. Naturalistic case study (3)	X	X	X	X	X	X
7. Monitoring (4)		X		X		
8. Professional review (5)		X	X	X	X	X
9. Operations research (6)				X		
10. Goals-means analysis (7)	X		X		X	
11. Time series analysis (8.a)					X	X
12. Replication study (8.b)					X	X
13. Panel study (8.c)					X	X
14. Statistical comparison between programme and non-programme group (9)					X	
15. 'Patched-up' design (10)					X	
16. Experimental design (11)					X	
EVALUATION CRITERION						
1. Capacity	X	X				
2. Effort		X		X		
3. Goal-directedness		X	X	X		
4. Effectiveness		X	X	X		
5. Flexibility		X	X	X		
6. Efficiency	X	X		X	X	X
7. Effectivity			X	X	X	X
8. Adequacy						X
9. Productivity					X	X
10. Response time					X	X

*) 1 = strategic evaluation; 2 = compliance evaluation; 3 = evaluation of programme design; 4 = evaluation of programme management; 5 = evaluation of intervention effects; 6 = impact evaluation.

**) The numbers in parenthesis refer to the numbers in Table 1.

b. This emphasis is explained by the fact that most evaluation studies are simple forms of intervention or impact measurement. Some pay attention to programme design and management, but strategic and compliance evaluation is rare.
c. Related to b. is the fact that the evaluation criterion most frequently used is effectivity; 75% of the evaluation projects pay attention to it. In some cases capacity, effort and adequacy are measured too, but the other criteria are rarely applied.
d. The research strategies most frequently used are output evaluation, statistical comparison between participants and non-participants, and monitoring. Input-output measurement of one type or another is relatively rare, while operations research, longitudinal research and experimental designs are completely lacking. Most evaluation research takes the form of a more or less sophisticated tracer study.
e. Techniques of data collection reflect these trends: generally they are of a rather formalized type (questionnaires, structured interviews, postal surveys), although in 25% of the cases more open interviews are used. Standardized tests to measure learning results, structured observation and more qualitative participant observation are rarely applied.
f. Data analysis is generally restricted to rather simple quantitative data on outputs (sometimes inputs as well), but qualitative formative evaluation is extremely rare.

One may conclude that most evaluation research on work-related programmes focuses on quantitative results mainly derived from the answers of clients to questions. Useful as this may be from the point of view of administrative check, it is hardly sufficient to the policy makers or those responsible for the implementation of a programme who want to learn something from the results. In the case of apparent failure, no clue is given as to its causes; and even if a project seems to be a success, it is not known why. Dissemination or expansion may then involve great risks. Without some form of summative evaluation, paying attention to the social processes that gave some positive or negative results, evaluation is useless as an input to policy making. And even if process evaluation is carried out, but is limited to the collection of purely quantitative data, causes of success or failure remain in the shade, since quantification can only locate the causes, not prove that some quantified 'factor' is the cause. Causes rest somewhere in the process of programme implementation and can only be assessed by a thorough qualitative analysis of this process.

This is not to say that quantitative forms of evaluation research should be refrained from. On the contrary, some pertinent questions can only be answered by quantitative means. Answers to the following questions should be high on the agenda of evaluation research:

1. Is it true (as is widely believed) that non-formal vocational training is cheaper than vocational schooling? Only a rigorously quantified comparative cost-benefit analysis can give the answer.
2. Is it true that non-formal training, by its greater curricular flexibility, gives better learning effects than vocational schools? To answer this question it is not sufficient to ask opinions of trainees on the value of the training they received; only standardized performance tests can give a valid answer.
3. Is it true that work-related programmes improve the labour market prospects of their participants, not only immediately after finishing a training course, but also in the long run? (i.e. does it do more than help people to find a job, in also helping them to keep the job?) Longitudinal tracer studies can give the answer.

In general, the criteria of capacity, effectivity, adequacy, productivity and response time demand quantified data, while the criteria of effort, goal-directedness (purposiveness), effectiveness and flexibility can only be assessed with a qualitative research methodology. Inputs and outputs can at least be partially quantified, through-puts hardly ever can. Some priority research questions for qualitative designs are:

4. Is it true that instructors of non-formal training programmes in practice adapt the programme of a training course to local conditions and expressed learning needs of trainees more than teachers in vocational schools do, or is their insufficient pedagogic-didactical training an impediment to such adaptations, whatever their expressed educational ideology? This question asks for an elucidation of the effectiveness and flexibility of different types of work-related education.
5. How do graduates of work-related programmes (formal and non-formal) actually use the knowledge and skills they learned? (Fowler gives an interesting strategy on how to answer this question; Fowler 1987). Too often researchers take for granted that what ex-trainees say they do with the things learned is a valid indicator of what they actually do. This asks for participant observation, or at least interviewing in depth.
6. To what extent indigenous technical and scientific knowledge can be infused in and combined with standard curricular contents in work-related educational programmes.

Of course, this is not all. But it may suffice to indicate that there is no 'best way' to carry out an evaluation research. Some methodological reflection seems to be the best approach to this underdeveloped research field. I hope this essay may contribute to develop it.

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25.

Aid and Educational Research in Developing Countries: the Role of CESO

Kenneth King

"Briefly, the Netherlands government does not have a comprehensive policy concerning aid to education. However, this does not mean it does not have any policy at all. On the contrary, there are a number of policies, mainly organised on the basis of a particular relationship between the Netherlands and a developing country or a group of countries." The author feels that this comment, prepared for a meeting on educational aid in 1986, could be extended to the role of Dutch research and evaluation in the fields of education and training in developing countries.

In this article the author makes an attempt to clarify some of these policies by looking at one specific research institute, the Centre for the Study of Education in Developing Countries (CESO), which has had long-term relationships with overseas countries in the field of education. The author looks at its institutional tradition and illustrates its stand through some of its research and evaluation activities, as well as the role of CESO in the Dutch research community concerned with research on education in developing countries.

One of the commonest occurrences in the everyday life of the educational systems of the poorer countries of the world is the arrival of outsiders. They come from multilateral agencies, from bilateral agencies, and from non-governmental organizations (NGO's). They come as aiders, as evaluators, as researchers and as consultants. Typically, they stay for a short time, and they have to reach judgements about the feasibility, continuation, or 'aid-worthiness' of projects in the field of education. The reports of their findings are not always easy to access, but in many instances they are influential in dictating changes in aid priorities or at least determining the nature of the debate about education for that particular agency.

The sheer quantity of these reports is hard to overestimate. Many of the poorer countries have forty to fifty separate externally aided education projects from as many as twenty different donors. They will also have an even larger number of small projects organized through co-financing institutions. The result of this multiplicity of external educational relationships is an immense amount of reporting, usually by outsiders, on the state of some particular programme in the developing country, or sometimes on the education system as a whole.

The reason for mentioning this very common Third World experience at the outside of this article is that comments by outsiders on every significant aspect of the national educational system is not something that happens frequently in industrialized countries like The Netherlands. With the exception of the occasional country review by an OECD[1] team, it is a very rare experience for an outsider to make an assessment of Dutch institutions. The present account is not of course associated with any aid relationship, but it is perhaps worth underlining some of the advantages and disadvantages of an outsider's perspective, since several of the institutions discussed in the body of this account are themselves frequently involved in review missions, evaluation reports and feasibility studies on projects and programmes in different developing countries.

Like much of the evaluation reporting on the Third World, this account suffers from having been done after a few days' visit to The Netherlands. Also like many of the outsiders' visits to developing countries, it has not been possible to read the documentation in the local language. The account is therefore biased towards what is available in English. In fact, a good deal of the material in The Netherlands that relates to developing countries is available in English since it is intended to be read by researchers and policy makers abroad. But, not surprisingly, many of the documents which seek to develop development policy itself within the Netherlands are in Dutch. Indeed, in the years since the first draft of this paper was completed (June 1987), several documents have appeared that are very important illustrations of this internal policy development process within The Netherlands:

> 'Briefadvies: onderzoek op het terrein van onderwijs en ontwikkeling' (i.e. 'Advisory Letter: Research in the Field of Education and Development') (RAWOO, June 1987).
>
> 'Voorstel programmeringsstudie: onderzoek op het terrein van onderwijs in ontwikkelingslanden' (i.e. 'Proposal for a Programme Study: Research in the Field of Education in Developing Countries') (CESO, June 1988).

In fact, the first, like other reports by the policy advisory body, RAWOO[2], may well eventually appear in English. The second, which is a proposal to develop a new process of collaborative educational research with developing countries, and which is even now underway, may well not be available in English, though it is certain that any major outcome from the review process will be translated.

A second drawback inherent in a brief visit from an outsider is that it takes place at a particular point in time, and thus inevitably reflects some of the issues that were salient then. It so happens that in the last years, there has been an unusually high level of activity in the field of educational research and development co-operation. Not only has there been the emergence of the documents we have just referred to, but there have been an number of other developments which may well alter the traditional role of the bodies we discuss.

There is, for instance, a continuing process of restructuring within the institutions of higher education. New, much larger units are emerging. New pressures for the internationalization of education are underway but these are much wider than the forces that led to the setting up of the International Education Programme with its current total of 18 institutions offering tailor-made courses in The Netherlands (and overseas) for students from developing countries. The new initiatives are driven by interests in preparing Dutch higher education to compete within the European Community of the 1990s. Indeed, nowadays, discussion of the internationalization of higher education is as likely to refer to a more international role within Europe as it is with developing countries. These discussions are likely to imply changes in the role also of the Netherlands Universities Foundation for International Co-operation (NUFFIC). The scope of the word 'International' in its title, which has traditionally meant international in a 'North-South' context of university collaboration, may well come to include a greater amount of 'North-North' traffic amongst the universities of the industrialized world.

There is another area where it is possible that there will be a significant change in the course of the next year, and that is in the conceptualization of CESO - the premier institutional focus in The Netherlands for the study of education in developing countries. We look in some detail at some of the historical developments of CESO, and we make the point that it is in some ways a very unusual centre, poised between a policy advisory role for government, an evaluative role, and a research and documentation role. However, in December 1988, on the occasion of its 25th anniversary, it is seeking to take stock of its achievements, as well as to chart its future. And in the process, it will look long and hard at two of the main focuses of its past and present work: Education and Culture; and Education and Productive Life.

It will be helped in this process of self-evaluation by the Programming Study to which we referred above. On the other hand, the discussion of a mandate for CESO for the 1990s will also afford an opportunity to explore wider issues which are of significance for the continued study of education in developing countries. How are new generations of young Dutch people acquiring expertise on education in the Third World? How significant will it be for the status of the field of education overseas that The Netherlands has, since 1991, at Utrecht University its first academic chair on the study of education in developing countries? Will the 1990s see the development of more teaching and research based within CESO, making it more of an international centre for the study of education?

The national context

We have mentioned some of the drawbacks in an outsider's account of the complex institutions that have been linked to the study and support of education in the developing world. But there are also some positive features in such an exercise. One is that there is very little publicly available literature on the map of educational aid in many of the industrialized countries. And thus even, if this is a very preliminary account, it provides a basis that can easily be improved upon.

Second, the author of this short paper has spent some time in the last two years looking at educational research and evaluation literature associated with a wide range of multilateral and bilateral agencies as well as some foundations. The results of that study are available under the title: 'Aid and educational research in developing countries: the role of the donor agencies in the analysis of education' (King 1988).

But in the process of visiting some 20 agencies, the initial impression gained from the early visits to The Netherlands has been confirmed - that CESO is relatively visible, but the Development Co-operation Ministry itself and the personnel therein concerned with education remain somewhat shadowy. We expect this to be rectified in further analysis of Dutch aid to education, and through further visits, but the easily available literature (to an outsider) does not readily communicate a sense of where Dutch development aid to education is located, in what kinds of projects, in what particular sites. It may be just the chance of the timing of my visit, but I have not so far come across a guideline on the regular Dutch aid to education, of the sort that is relatively easily available in SIDA, USAID, ODA, or GTZ,[3] to mention some of the other bilateral donors. My impression from the amount of current thinking about education and development is that this is due to change, but the following quotation from a 1986 country paper on The Netherlands confirmed my earlier feeling that there is not currently a grand design for aid to education, but rather the continuation of a set of specific policies which have proved themselves over time:

> *Briefly, the Netherlands government does not have a comprehensive policy concerning aid to education. However, this does not mean it does not have any policy at all. On the contrary, there are a number of policies, mainly organised on the basis of a particular relationship between The Netherlands and a developing country or a group of countries.*[4]

This comment, prepared for a meeting on educational aid in 1986, could be extended to the role of Dutch research and evaluation in the fields of education and training in developing countries. Historically, there have been a series of research and evaluation policies embedded in various institutions which have had long-term relationships with overseas countries. Among the more obvious of such institutions would be NUFFIC - the Netherlands Universities Foundation for International Co-operation; CESO; and the IE system of International Education institutes in The Netherlands, with their parallel international education training projects overseas. In addition, since our concern is with donor-aided activities that involve research and evaluation, it is impossible to omit reference to the work of the Bernard Van Leer Foundation, based in The Hague and making grants in the field of education to more than 30 countries.

All four institutions have considerable traditions behind them. Naturally, these traditions have changed quite significantly over time, but in some respects there has been very substantial continuity.

Here the attempt will be to get a little behind one of these institutional traditions, illustrating through CESO some of the Dutch research and evaluation activities. We shall depend principally upon those interviews with a variety of people who work in these institutions as well as with others who have pursued research in developing countries from a Dutch university base. The result will consequently be far from comprehensive, but its very weaknesses and gaps in understanding may serve some purpose - in pointing to areas of Dutch co-operation policy that are difficult to unravel in a short time.

CESO's tradition

To the outsider, as we have said, one of the most intriguing elements is the relative invisibility of the professional policy advisory people in the Ministry of Development Co-operation. In international meetings concerned with aid or education in developing countries, the pattern has often appeared to be for NUFFIC or CESO representatives to be present, where Germany, Britain, Canada or Sweden would have someone from the aid agency itself. Without making too much of what may even just be an impression, it could mean that the ministerial policy in The Netherlands has been one of delegation - at least in the area of debate and discussion of international education issues. It could also point to the fact that CESO, in so far as it is a research institution, is rather different from what may first seem like parallel centres in other industrialized countries. It may be useful, therefore, to begin with a brief examination of the CESO tradition.

Unlike some other centres that specialise in the study of education overseas, CESO is not linked to a university, nor is it one of the International Education centres (18 in all) which have hitherto specialised in tailor-made courses for overseas professionals coming to The Netherlands for periods of three months to two years, and then returning to their own countries. Other international education centres such as those in London, Harvard or Stanford Universities do have quite close links with the donor agencies, but are ultimately part of universities. CESO, by contrast, is organizationally under NUFFIC's umbrella, and through its location in the same building as NUFFIC it inevitably takes on something of the same policy advisory cast. However, it has had a governing board (now supervisory board) that was/is very largely made up of university professors.

Disciplinary backgrounds

It is interesting to note that in the early 1960's, when CESO was founded,its governing board was made up of a fascinating set of disciplines, but by far the most prominent was non-western sociology or anthropology. Board members included the following fields, which may give some indication of the kind of research originally intended: cultural anthropology, religious anthropology, economics of non-western countries, ethnology, sociology of African countries, non-western sociology, hydraulics, education and linguistics.[5] It is important not to read too much into this, but the fact that there was only a single board member coming from education and so many from sociology and anthropology could have meant that the focus of research was likely to be on education as an element in social change. Indeed, the early name of the Centre was 'Centre for the Study of Education in Changing Societies.' It could also have meant that the education research tradition within The Netherlands was not perceived to be particulary relevant to a body like CESO.

Be that as it may, the actual staff members of CESO in the early days as well as more recently were substantially drawn from the same disciplines as the governing board. For instance, the current staff have been drawn, many of them, from a single source - the study of Non-Western Sociology or Cultural Anthropology in the University of Leiden. This would include the present director, Leo Dubbeldam, as well as Wim Biervliet, Cees Epskamp, Ad Boeren, Theo Oltheten, Soehirman Patmo and A.R.K.C. Thybergin. Other members of the present group have done anthropology in Amsterdam (Adri Kater), in Utrecht (Wim Hoppers) and the previous director (J.H. Kraak) studied Indology and anthropology also in Utrecht. Like the governing board, only one person of the present team (a contract staff) appears to have had a background in education (J.M.A. van Dam) and one other, more generally in social sciences in Amsterdam (G. van der Molen),[6] though he too also applied sociology with a non-western tinge.

CESO's research throughout the years

Without wanting to make too much of any connection between disciplinary background and subsequent research approaches, it is worth noting that the CESO staff with few exceptions have not been educational economists, planners, nor specialists in educational areas such as curriculum development. In approaching research, therefore, it should not perhaps be surprising that the largest single piece of team research ever undertaken by CESO should have been in one district of Tanzania, and principally concerned with the impact of primary schools on society. This project consumed the bulk of CESO's funds for five years, involving an interdisciplinary team of six people working in the field. Perhaps the one which most typified the anthropological tradition was Varkevisser's *Socialisation in a changing society. Sukuma childhood in rural and urban Mwanza Tanzania*, but several others looked at migration, estrangement, the plight of primary school leavers etc.

By one of the coincidences of research location, this large piece of field work was being completed at the very time that Nyerere announced the education reform called 'Education for Self-Reliance'. Dar-es-Salaam requested a report of the findings at the earliest opportunity, and a mission was dispatched to present a summary. The laconic report of this high-level meeting underlines the difficulty of translating research into policy, regardless of whether the research is done and funded locally or externally:

> *"The discussion revealed a strong consensus regarding the analysis of the existing education system. The divergence of opinion, on both sides, about the policy implications demonstrated both the difficulty of translating research findings into practical policy, and the close relationship between all fundamental educational issues and national policy considerations."*[7]

It would require some historical research to evaluate the impact of these early CESO studies. Did they influence the Ministry of Education in

Tanzania, or those studying education in the university or teacher colleges? Did they influence the Dutch Ministry of Development Co-operation which was ultimately paying for the salaries of several of the team? Did they, finally, influence CESO's own research policy? Links would certainly not appear to have been very strong with Tanzanian educators or with the university during the research phase. And so possibly one of the lessons learnt was the importance of closer collaboration with the research and policy community in future research. However, the plans to extend the Tanzanian research into neighbouring Uganda in collaboration with the local university, Makerere, were frustrated by the arrival of general Amin. It was not only external causes that deflected CESO from its initial research emphasis. Back at home, its permanent research budget was discontinued, and the possibility of extended fieldwork in the Mwanza mode effectively halted.

Continuity and change

As far as the content of CESO research is concerned, there would still seem to be some continuities in 1988 of the approaches of 20 years earlier. There is still the fascination with indigenous knowledge and local systems of learning, paralleling with work by Varkevisser on the Sukuma of Tanzania. Now, however, some of its main contacts are with the regional centre for innovation in education in the SEAMEO countries, INNOTECH, which had taken the lead in organizing a seminar on indigenous learning systems in 1981. As part of Dutch-aided co-operation between CESO and INNOTECH, researchers from CESO are also involved in various roles with a much longer term project called, delightfully, DELSILIFE - Development of a Coordinated Intervention System for Improving the Quality of Life of the Rural Poor through Self-Reliance.[8] In three of the SEAMEO countries, Indonesia, Thailand, and the Philippines, this has meant developing experimental strategies for community development and group learning at the village level. The project started officially in 1980, and now in 1988 it is entering its third phase, still with funding from the Netherlands Ministry of Development Co-Operation, and with the involvement of CESO. As compared with the Tanzania project, the Dutch researchers now have more of an advisory role, while all the major design and development work is done by the various national teams. Equally, the bulk of the reporting and outcomes of the projects are only easily available locally.

This suggests an interesting contrast between the two styles of research co-operation. In the earlier round, the studies were principally carried out by the Dutch, and within a few years there were plenty of accessible publications - in The Netherlands, but apparently not a great deal of impact in Tanzania itself. In the DELSILIFE project, there are locally produced conference reports, and reports of national teams, but little of this is readily available to the research committee in The Netherlands. Apart from the occasional article published by CESO, the focus of publication and dissemination remains in South-East Asia. Now in 1988, the project will 'go to scale' in the Philippines, Thailand and Indonesia. But it is now no longer a question of foreign researchers seeking to argue the policy relevance of their research, as with the Tanzanian project, but the Dutch researchers are now in more of a consultant role to the local studies, playing a part that is both advisory and evaluative, and acting also as a go-between among the local research teams on the one hand and the Dutch Ministry of Development Co-operation on the other.

Patterns of fields of interest

We shall return shortly to look a little more at some of the possible tensions between research and evaluation activities within CESO, but for the moment it may be worth underlining somewhat more the strong and continuing fascination with education and culture amongst many of its researchers. Illustrative of this strain is a small publication which included no less than seven people from CESO, all with disciplinary and professional interests in cultural anthropology: *Education and the development of cultural identity: Groping in the dark.*[9] The very tentativeness of this title is indicative of the fact that the volume is not prescriptive. It nevertheless contains a good deal of insight into the overlapping interests of CESO members in popular culture, communication, indigenous learning, and participatory education. In addition to the examples from the SEAMEO region, there is a tantalizingly short account of an experimental Dutch-aided project through CESO to develop a curriculum for the Amazon Indians in Columbia.[10] Even though CESO's role consisted mostly of supervision, evaluation and some technical assistance, it is intriguing that this particular project with native communities should have become the focus of a technical co-operation activity.

Looking across a number of the publications, occasional papers and reprints handled by the CESO publication section, a pattern emerges of the themes that are connected with basic education, popular media, culture and society. The focus of CESO's professional interests has clearly been at the local level, in the village primary school and its teachers, the problems of the young people, their entertainments and literacy. In a word, basic education both formal and informal, but hardly any publication that relates to secondary or higher education. A listing of just a few illustrative titles will make the point. Even when the CESO researchers have not been responsible for writing a particular paper, the fact that they have chosen to publish it, is indicative of their interests:

W. Hoppers	*Education in a rural society; primary pupils and schoolleavers in Mwinilunga, Zambia* (1981)
A. Kater (ed.)	*Anthropologists approaching education* (1981)
J. Ooijens	*Functional education of adults and development experiences in Latin America* (1982)
L. Dubbeldam	*Primary education in the Third World: an overview of quantity and quality* (1982)
C. Epskamp	*From indigenous to endogenous performing arts in Zambia* (1986).

These are only a few of the many that would have further confirmed the strong emphasis on elements of basic and adult education, looked at from a cultural viewpoint. It is at first glance refreshing to come across a research institute which is relatively close to government, and which is able to concern itself with matters as 'the role of indigenous knowledge and the way it is acquired in small-scale fisheries,'[11] but there is also the issue of how the discipline of anthropology itself can offer advice on so many of the more mundane questions facing educational planners. Kater, a CESO staff member, has made an interesting comment on just this issue:

> *"As a matter of fact, anthropologists often cease to act as such when they become employed in an educational institution. I do not intend to say that anthropologists are necessarily conservative in the sense that they want to maintain the existing cultural differences. They study culture and society as they are and how they change. They do not, however, as anthropologists try to build models for change, and they are still less inclined to claim that their discipline will show them a better society they will help to realize."*[12]

One possible result of this tension between reflections and prescription may be that CESO has not found itself involved in so many of the policy debates about education and training in developing countries over the last two decades. Nor may it have proved easy to persuade the relevant ministry to release funds for research into culture, indigenous learning and their relations in education. Instead, any available ministry funds have been for the regular evaluation of the International Education training projects in the region. Over the years, a very considerable portion of CESO staff time has gone into the evaluation of such courses as 'International Training Programme on Seed Technology for Vegetable Crops at Los Banos, the Philippines,' and countless others offered by the International Education institutes overseas.

CESO as an evaluator

In many cases, inevitably, the courses are on scientific and technological areas in which CESO has no particular comparative advantage; in others, the training field may be industrial or rural development, food, nutrition or local administration. Frequently, there must be courses where the sensitivities associated with cultural anthropology are a help in judging impact, but once the evaluation process becomes routinized there will cease to be a spin-off. What seems to have happened over time is that as CESO has not been itself an IE centre it has been seen as an objective source for the evaluation of training courses overseas, and also a repository of expertise in the whole area of evaluation. There has, in this sense, therefore, been something of a switch in emphasis from CESO as a research body to CESO as an evaluator. The funds from the evaluation activities appear to make possible some of the research that proves otherwise difficult to fund.

Apart from the succession of short-term evaluation activities, CESO has also been involved in the much wider ranging reviews of the IE programme as a whole. This has allowed it, to some extent, to gather insights from many years of work and apply these to a comprehensive evaluation. In their own right some of these larger-scale evaluations must be seen as an important part of donor-aided research and evaluation, since they seek to systematize research information on Dutch training aid. They have their counterparts in other donor countries, too, where there has been a great deal of research and evaluation (funded by the donors) on overseas training and effectiveness. Hence Adri Kater's book, *Evaluation of International Education: an approach to the evaluation of International Education as a tool for the realisation of Dutch development co-operation* (1979), is part of a growing corpus of related work on the evaluation of training aid.[13] Similarly, CESO's part in the much larger three year 'Evaluation of the Netherlands Programme of International Education' (EPIO) is a further contribution to that research literature.[14]

Recent developments

Finally, in this discussion of CESO, it may be useful to make some comments about some of the more recent developments. As is so often the case, new research priorities are often the result of the arrival of new researchers. This was certainly true of the new research line on training and productive work, and on the related concerns of young people in their transition from school to working life. But as this new research field connected back to interests that had long been present in CESO's traditional emphasis on the integration of young people into society, it may be useful to spend a moment examining the interconnections of what may appear like a new emphasis in donor-aided research and evaluation. And it is particularly appropriate to do so in a case study mode for a centre like CESO. It would of course have been possible to take several of the other research lines, like agricultural education, or indigenous learning in small-scale fisheries, and make similar points.

The research field of training and productive work, youth, and transition from school to work: a case study in CESO.

The development of this area within CESO was largely due to the arrival of Wim Hoppers in the institution in 1982. However, the development of the field lay much further back, in his work both in school and in university in Zambia where he was able to pursue work for several years on primary pupils and school leavers in one small area of the country. He had studied cultural anthropology in Utrecht, and perhaps not surprisingly found himself drawing on anthropological field data from the 1950s as he began to focus on the district of Mwinilunga in North-Western Province. Why Mwinilunga? Because, through Dutch development aid, he had been teaching there in secondary school in the early 1970s. This is an important point at a much more general level, because educational research does need to be based upon some experience of education in developing countries. Hence, agencies thinking about the maintenance of the capacity of their own nationals to do research on development need to be aware of the importance of some form of 'apprenticeship', whether as a teacher, volunteer, or 'associate expert' with the UN family.

The first two major studies carried out by Hoppers were not in fact funded through the Ministry of Development Co-operation, but the first was as much supported by the University of Zambia as any one else, while the second - on the subject of youth training schemes and the informal urban sector - was funded by WOTRO, the Netherlands Foundation for the

Advancement of Tropical Science, and sponsored by CESO.[15] Both studies, but particularly the first, drew on the earlier traditions of school leaver research in Africa, including CESO's own large scale project in Tanzania in the late 1960s. This may appear an obvious point but the primary audience of research is often other researchers, and thus the impact of the Dutch Mwanza project can also be judged by whether its findings transfer and are found useful in other projects. It is often the case that this impact can be enduring, and that some five to ten years later research can be influential in the formation of teachers, in the training of post-graduates in education, and also in the policy process. The notion of the direct influence of research on policy is much too simple. And hence the fact that Kaayk, Heijnen and Varkevisser, along with the CESO study in which they participated, are referred to in a study about Zambia some ten years later, is one indication of the complex routes which research results travel.

The second of the two studies (on youth training and the informal sector in Lusaka) was actually conducted as a piece of doctoral research through another centre for the study of education overseas, the Education in Developing Countries Department of the London Institute of Education. Again, this may point up the fact that during that time CESO did not have a formal teaching and research supervision role as would a university centre. In this particular case (of Hoppers), the advantages of research training in a different intellectual tradition were combined with easier access to key institutions like the Commonwealth's Youth Programme and the Commonwealth Secretariat, than would have been common for a Dutch citizen. These connections and the Youth Programme's base in Lusaka then led Hoppers, a Dutch citizen, to carry out a study for the Commonwealth: *After training what? Youth training and self-employment in Botswana and Zambia* (1985). We follow this research trail a little longer to indicate the difficulty of attributing particular research themes to single sources of agency inspiration.

Education with Production

This flexible use of resource people from outside the Commonwealth or outside a particular country is still unusual for both multilateral and bilateral agencies, but it is probably simpler to arrange when, as in this case, both Botswana and Zambia are countries that are part of a region (Southern Africa) that is a special recipient of Dutch technical co-operation. The research link to Botswana doubtless brought Hoppers into closer contact with the Brigades organized by Patrick Van Rensburg, and with Swedish SIDA which had so closely supported them. At almost the same time, connections were going to become closer at the interagency level, as Hoppers became involved with the IDRC's[16] Research Review and Advisory Group (RRAG) which at that very point in 1984 was looking for a way of focusing more systematic attention on the whole field of Education with Production, associated with Van Rensburg.

Hoppers, working out of CESO since 1982, felt it would make good sense to develop and extend this notion of education and production, through some form of highly collaborative research. And where had this notion come from? Partly from Hoppers' own experience in Zambia, partly from IDRC with its strong emphasis on networking across the developing countries, and partly from a rather unusual conference held in Sussex University in 1984, which was analyzing 'the conditions of research in and with developing countries.' The outcome of that meeting (itself donor-aided in many different ways) was an issue of the *IDS Bulletin*: 'Education Research: issues in Cross-National Collaboration' (1984), and one of the strongest messages at the seminar was that there should have been stronger participation by developing countries in a meeting that was actually dedicated to the topic, and not mainly British, German and Dutch participants.[17]

These various influences came together when the Dutch Association of Researchers in Education in Developing Countries (WGOO) suggested that the next meeting of the Dutch, German and British researchers should be held in Holland and would be on the theme of Youth Programmes and the Transition from School to Work.

During 1985, urged by Hoppers' interests, both these themes entered more formally into CESO's programme of work. On the one hand there was the first meeting in February 1985 of the new Research Programme on Education with Production in Theory and Action (EPTA), followed by its first workshop report: *Report of a Workshop on Education with Production* (1985).[18] These were interesting departures from CESO traditions, since they sought to link together researchers in the North and the South who were working on the systematization of education with production. This EPTA network, with its secretariat in CESO, sought to raise funds for the research programme amongst other donors, and was successful in getting some limited Commonwealth support for the Caribbean, and more significant Swedish SIDA support for the countries of anglophone Africa.

On the other hand, the major meeting of December 1985 in The Netherlands on Youth Programmes and the Transition from School to Work had brought CESO and WGOO into close collaboration. More importantly, the meeting itself marked the extraordinary potential a European centre has in drawing participants from across Europe and developing countries by using a multiplicity of different sponsoring bodies.[19] On this particular occasion, several Dutch ministries gave support as well as NOVIB (a Dutch co-financing agency), the EEC and UNESCO. No less than 32 out of the 67 participants were from developing countries. And during 1987, a major volume of research findings from the conference emerged, edited by Emiel Droogleever Fortuijn, Wim Hoppers and Margaret Morgan, under the title: *Paving pathways to work: comparative perspectives on the transition from school to work* (CESO, 1987).

Comments on the case study

By April 1987, CESO's medium term plan, 1987-1989,[20] was indicating that one of its four programme themes was 'Education and Productive Life', and this was expressed in two of its research activities: Research Programme for Education and Production in Theory and Action (EPTA), and Research into the Training of Skills and Labour Programmes for Out of School Youth. The purpose of the previous section was to give some sort of insight into how a research line may get established. It is particularly relevant in an institute concerned with the history and culture of research to be aware of such antecedents. A similar kind of analysis could probably have been done on some of the other current CESO research activities - such as 'indigenous learning in small-scale fishery'; 'functional adult education', 'agricultural education and rural development'. Each of these and several others would have equally complex histories. But it may be useful at this stage to try and summarize some of the issues that are raised by this kind of analysis - which has itself been very partial and impressionistic:

1. In CESO, as in many research centres, the fields of research interest are almost inseparably connected to and imbedded in individuals. The individual's departure can effectively remove a whole area of work, or put it on ice.
2. When it comes to assigning responsibility, in funding terms, for a particular research theme, it is unlikely that a particular donor can claim a major share, except when it is the first place of research a person has done - and even then there are difficulties. But in ordinary circumstances, a piece of aided education research is founded on earlier research funded by other bodies (or even unfunded), and is affected even whilst it is being executed by other influences. In the case of EPTA, which might appear to be a CESO research line, the antecedents are many, including SIDA, Commonwealth Youth Programme,

IDRC, and the Foundation for Education with Production (FEP) itself, whilst the catalyst is the personal and professional experience of Hoppers in his rural and urban research in Zambia. Similarly in the case of the other line, 'research into the training skills etc.', WOTRO may have played a part at a crucial point, but the ancestry of this line is much longer than that particular grant, and its shape since the end of the formal research has been affected by many other influences, not in the least by the major conference on Youth Programmes and the Transition from School to Work.

3. As important as anything is the organisational style associated with a particular theme of research, and here again the influences have been many. North-South networking has been affected in different ways by the different agency styles as by the collaborative conferences.
4. As to CESO itself, its role was initially to act as an umbrella for WOTRO research projects, and then increasingly to accommodate the researcher and his project ideas within the CESO mainstream. This then meant an involvement in some of the evaluation activity related to IE and to the EPIO evaluation.
5. Finally, as with many other lines of CESO research activity, there is the question of how they might relate to the ongoing or new education and training projects of the Dutch Ministry of Development Co-operation. Thus far, most of the activities that have been described for these two research lines (EPTA and the Youth Skills) have been relatively closely linked to Dutch education projects overseas, in the manner of experimental curriculum for Indians in Columbia, or the evaluation and monitoring activities which CESO carries out with DELSILIFE. The expectation might be that if the youth skills and informal training research line is to flourish, it would need somehow to become project-related; that is to say that it would need to connect itself in a substantial way to some of the major projects of Dutch co-operation that may be concerned with youth training, skill training, or technical-vocational education and training. Obviously, a minimum point of connection is with the evaluation of overseas training courses that are related to training in small-scale industries, but it would be interesting to know whether there are several education projects to which these kinds of research insights could make a contribution. Another possible connection would be at the policy level. Apparently the Dutch Co-operation Ministry has just developed a sectoral note on the informal sector; it would seem natural if there were a connection between original fieldwork like Hoppers' on the informal sector and the sectoral note.

6. A final comment is at a more general level. Having looked in some depth at the development of a single new research line in CESO, it has made us aware of a dimension that was not made explicit before: the nature of the relationship between the various education projects of the Development Co-operation Ministry and the research projects of CESO. In the available literature it is difficult to get a sense of this relationship, and the principal reason for this difficulty is that while we have a fairly good sense of the universe of CESO projects, we do not have that for the Development Co-operation Ministry. Or to be more accurate, there is a very comprehensive list of all types of co-operation projects, broken down by category, country, and delivery mechanism. But there does not appear to be a synthetic document that takes just the category of education (formal and non-formal) and summarize the project types and their rationales.[21]

I have looked elsewhere at the new sectoral paper on Education, Training and Research, but the original impression of it was that it was 'oriented exclusively towards college, secondary and university education.'[22] By contrast, the thrust of much of CESO's research interests has been with basic education, and with patterns of learning in the home and in the work place. The new programmes of EPTA and youth training have also put the emphasis on basic education and on the transition from that to working life. Therefore at the moment there would appear to be something of a disjunction between the stated research interests of CESO and the developments anticipated in the sectoral paper. And even with the existing projects of bilateral co-operation, it would seem that CESO's regular evaluation activity has been either with parts of NUFFIC's university programme or with professional training courses overseas linked to the IE system - neither of which have had close links with the kinds of research interests of CESO.

To the external observer, it would seem that CESO, while ultimately receiving its funding from the Ministry of Development Co-operation, carries out project-related evaluation mostly at the tertiary level, and not so much on bilateral projects which are closer to its own research interests. At the same time, not being a university institution, it does not appear to have the freedom or even the kind of research funding that would allow it to capitalize on those research interests. These characteristics may well change, however, as the new sectoral programme is negotiated into existence.

Notes

1. OECD: Organization for Economic Cooperation and Development.
2. RAWOO: (Netherlands) Advisory Council for Scientific Research in Development Problems.
3. SIDA: Swedish International Development Authority.
   USAID: United States Agency for International Development.
   ODA: Overseas Development Administration.
   GTZ: Gesellschaft fur Technische Zusammenarbeit.
4. NUFFIC, 'European Education Aid Donors Conference: Country Paper: The Netherlands', London, May 12-13, 1986, mimeo, p. 1.
5. Centre for the Study of Education in Changing Societies (CESO), Report 1986, Amsterdam (1986), p. 8.
6. Editorial note: at present G. van der Molen is employed elsewhere.
7. CESO, Report 1986, p. 3.
8. See: Molen, G. van der (1984) and INNOTECH (1981).
9. Epskamp (ed.), 1984, with articles by Kraak, Dubbeldam, Kater, Thybergin, Oltheten and Ooijens, and Epskamp.
10. Thybergin et al., 1984
11. Kater 1986.
12. Kater 1981, pp. 83.
13. See Kater (1979), Dubbeldam (1970), Heijnen (1968), Kaayk (1976), Renes (1970), CESO (1969).
14. EPIO: Info Set, Evaluation of the Netherlands Programme of International Education (The Hague, 1984).
15. Hoppers (1981) and Hoppers (1985a).
16. IDRC: International Development Research Centre.
17. *IDS Bulletin*: 'Education Research: Issues in Cross-National Collaboration' (Special issue, vol.15, no.4, Oct.1984). See also *International Journal of Educational Development*, vol.5, no.3, 1985.
18. Research Programme on Education and Production in Theory and action (EPTA): Report of a Workshop on Education with Production, held in The Hague, The Netherlands, Feb. 21-24, 1985. The Hague: CESO, 1985.
19. Hoppers (ed.), 1986.
20. CESO Medium Term Plan, 1987-1989. (CESO, April 1987).
21. See, however, Projektlijst, August 1985 (Bilaterale projekten in het kader van de Nederlandse financiele en technische samenwerking met ontwikkelingslanden).

22 CESO Medium Term Plan, 1987-1989, p. 5.

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26.

The Design of a Programme for North-South Collaborative Educational Research: Balancing between Bondage and Razor's Edge

Wim E. Biervliet

This article outlines Dutch development assistance especially in fields related to education, training and research. Policy research on education for development executed by the World Bank in support of its lending programme is sketched as an important factor in shaping the educational research agenda in developing countries. Approaches of other donors in those fields are highlighted, especially focusing on the approaches opted for by IDRC and SAREC. Types of collaborative educational research for development and constraints in arriving at joint North-South research in equal partnership are described, and efforts by CESO and researchers from Dutch universities to arrive at such research are outlined and assessed.

The main component of a research proposal to design a comprehensive programme of research related to the themes 'education, labour market and employment' and 'education and culture' are described. Some initial comments are made on the interactive methodology and on procedures to arrive at a proper involvement of research environments in developing countries in the design of the collaborative research programme.

Education in the developing world remains in a crisis which has not been adequately accommodated by increased external aid to education. Programmes such as World Literacy and Universal Primary Education did not meet their targets as access to primary education is still far from being universal and illiteracy rates, especially among women and in rural areas, are still massive. Educators are still faced with debates concerning issues of quality of education, of equity and of the link between human resources development and employment. How can educational research not merely adjust to the action agenda with a matching research agenda, but establish a research agenda that reflects the ultimate development needs? The answer to this question may provide guidelines for policy makers in their decisions concerning the allocation of scarce resources, tools for practitioners to effectively implement reforms and directions to donors to be better able to play a catalyst role in indigenous based and initiated processes of education and training for development. From a Northern donor point of view it would entail a process of response rather than initiation; from a research point of view it would mean the need to strengthen the indigenous educational research infrastructure to facilitate the design and implementation of research of direct relevance for development issues.

The picture of educational research, however, looks gloomy. The educational research agenda and the market for educational research seems to be strongly dependent on international organizations. As Court indicated, "a sequence of international fashions has shaped educational aid and hence the direction of research in the past ten years in Kenya as elsewhere. The path has been from higher education, to secondary, to primary, to basic, to non-formal, to vocational, to pre-school education" (Court 1983:182). The South, rather than being the beneficiary, has to take on a position of subject and object in a research arena battered by inequalities of the international knowledge system and a dependency on external financing. In order to improve the capacity of research to guide policy makers, a plea is made to apply a broader range of research paradigms. One way of increasing the impact of educational research might be to enhance a participatory collaborative type of research directly involving practitioners and users of educational research (Wright 1988). Given the linkage of education with other sectors which embody employment and work requirements and possibilities, an inter-disciplinary and inter-agency approach is recommended (Cohen and Reiff 1984).

If such an approach is opted for, it does not seem to be sufficient to restrict research instruments to quantitative indicators utilized within formal education. We can not perceive informal education and vocational training from a formal education point of view, just as - even though they are interrelated - formal sector employment and employment in the informal sector are separate realities working with different client groups, asking for different interventions and sometimes for different research approaches and skills.

Yet there are also illuminating and encouraging approaches opted for by donor agencies such as the International Development Research Centre (IDRC), the Swedish International Development Authority (SIDA), the Gesellschaft für Technische Zusammenarbeit (GTZ) and the Canadian International Development Agency (CIDA).

Especially IDRC and SIDA/SAREC[1] are in the vanguard of projects related to the strengthening of the research infrastructure in the South through sponsoring research training, the Research Review and Advisory Group (RRAG), seminars to disseminate research results, national education research networks, research proposals both from researchers from developing countries and collaborative South-North research. Although the Netherlands strongly fosters a promotion of self-reliance of developing countries through the transfer of knowledge and skills and the enhancement of a gradual build-up and strengthening of educational and research facilities, Dutch development assistance until recently did not pay particular attention to sponsoring educational research for development.

The law of the retarded progress may, however, become applicable, as CESO was requested to design, in co-operation with educational researchers and users of research results, a programme for North-South Collaborative Research related to the themes 'Education, Labour market and Employment' and 'Education and Culture'.

This article is a first attempt to come into sustained communication with interest groups in the South and those involved in the Research Review and Advisory Group concerning the design of the programme which will constitute the basis for the initiation, securing funds for, implementation and dissemination of specific research projects within the programme involving researchers from the South and North in a truly collaborative partnership. The article will outline Dutch development assistance especially in fields related to education, training and research. Subsequently approaches of other donors in those fields will be highlighted, especially focusing on the innovative approach of IDRC. Types of collaborative research and constraints will be described and efforts both from CESO and Dutch universities in the field of education research for development will be outlined and assessed related to their potential for collaborative research. A research proposal to design a comprehensive programme of research in the field of education for development will be described. Finally follow some initial comments on the methodology and involvement of the research environments in developing countries, including questions about the feasibility and constraints for collaborative North-South educational research.

Dutch development assistance

The Dutch budget for 1989 for development assistance amounts to 5.5 billion guilders, corresponding to 1.5% of the estimated net national income. From this budget 160 million guilders is allocated to the sector programme Training, Education and Research. The main aim of the sector programme is to enhance the capacity and quality of human resources in developing countries and to generate innovative knowledge in and for these countries. The programme concentrates on institution building, manpower development and research and development, through a programme of interinstitutional co-operation between Dutch institutions and institutions in developing countries. It contains a programme of fellowships for Third World nationals to attend highly specialized post-graduate courses in the Netherlands, a programme of direct assistance to institutions in developing countries especially advocating South-South co-operation between education/training institutions and a programme of Research and Technology focusing on the development of new methods, techniques and policy measures by means of strategic fundamental and applied policy-related research.[2]

As project-related training and research within the bilateral programme is not incorporated in this sector programme, actual allocations within the Dutch technical assistance programme for education, training and research will be far more substantial and well above 10% of the overall budget for Dutch development assistance. For the Research and Technology Programme 43 million guilders has been allocated, which is meagre given its remit of providing empirical evidence for formulating policy alternatives as well as research related to development issues. Although the Organization for Economic Co-operation and Development (OECD) in a survey on Scientific and Technical Co-operation with Developing Countries identified an additional 250 million for research and development in other sectors, regional and bilateral budgets, it referred to the fragmented and piecemeal approach towards research activities with many funds being allocated to ad-hoc research activities, but little systematic funding taking place related to the strengthening of the research infrastructure (OECD 1984).

Another assessment referred to the strong emphasis on research undertaken by Dutch scientists, little emphasis on research within an international framework and little stress on follow-up application and dissemination of research results (Berg & Tack 1988).

Until recently, education research for development was given low priority in Dutch development assistance. Under the category 'human resources research' a shift was noted in the seventies from education to health/nutrition, poverty and employment. Very few research proposals were submitted, providing a kind of legitimacy to the low priority allocation.

Within the technical assistance programme policy-related research for identification, monitoring and evaluation of projects within the sector programme education, training and research and bilateral projects with an education/training component is an activity built within the project cycle (RAWOO 1987).

In the most recent policy-document, some of the comments by OECD have been accommodated: "although no specific objective, the programme stresses the strengthening of the research capacity of developing countries by allocating as much as possible research to institutions in developing countries. The feasibility is to be assessed of restricting research activities to certain programme clusters of research projects supervised and monitored by a steering group with an executing secretariat."

Given the role of Dutch technical assistance in allocating funds for projects in the sector programme 'education, training and research', project-related training and research in other programmes and in assessing priority of projects proposed with respect to the overall aims of development assistance, the weak emphasis on research may lead to a gap between reality and theory as an empirical basis for policy is lacking.

This gap was recognized by the Advisory Council for Scientific Research in Development Problems (RAWOO), which in July 1987 issued an advisory letter to the government of the Netherlands concerning research on education in developing countries. It noted the lack of interest and financial support within the framework of Dutch development assistance for educational research dealing with medium and long-term problems and policies, as opposed to short-term advisory work and evaluation research. They expressed concern about the inadequacy of educational research capacity and research environments in developing countries and about the rather small and fragmented educational research capacity in the Netherlands.

The Advisory Council recommended efforts towards basic strategic educational research focusing on 'education for all', 'education, labour market and employment' and 'education and culture' to be elaborated upon in a country-specific context in consultation with local researchers and users of research results. Research proposals should be incorporated in a comprehensive research programme, mobilising the scattered Dutch research potential and researchers from participating institutions in developing countries into a co-operative research network. The research programme should concentrate on two or three countries which have priority status in Dutch bilateral assistance. As selection criteria both Dutch assistance to education, and training in the respective country and regional policies, were taken, leading to a preliminary selection of Indonesia, Pakistan, Southern Africa and Central America. Finally the Council recommended priority allocation of education and training research in the research and technology programme of Dutch development assistance.

Initiatives of other donors

There are some channels of exchange of information between donors involved in aid to education such as the International Working Group on Education, and the Development Assistance Committee. Yet, international donor co-ordination and systematic dissemination of donor aided educational assistance and research is still far from being achieved. The Research Review and Advisory Group, both through the NORRAG Newsletter and through a series of descriptive studies on donor-aided educational research, is enhancing transparency of donor policy and activities, not in the last place for its constituency of educational researchers and users of research results in the South (NORRAG News 1987; King 1987).

World Bank

The policy research on education for development executed by the World Bank as a corollary to and in support of its lending programme has shaped the educational research agenda in a significant way.

As Altbach in a fascinating editorial 'International Organizations, Educational Policy, and Research: a Changing Balance' indicates, both the size of Bank lending in education and the staffing of the Education and Training Department of the Bank are unparalleled (Altbach 1988).

Yet the areas of Bank research and publications reflect World Bank lending programme needs: areas like access and equity, internal and external efficiency of education, costs and financing, educational planning and vocational education, the way in which topics within these areas are selected and operationalized and the preference for quantitative indicators suitable for a survey type of research, reflect World Bank lending programme needs. This high quality research should be part of the research agenda rather than becoming the mainstream of it. Special issues of journals, themes of conferences and contributions by Northern scholars seem to be shaped by it, whether it refers to diversification, austerity, education priorities in Sub-Saharan Africa, or technical and vocational education. While the Bank had already shifted its lending programme away from diversified secondary schools, a vast body of research studies was still demonstrating the fact that such schools were not cost-effective. In the meantime, the Bank's lending programme had supported such schools through 79 projects in 25 countries. Who is benefiting from such research?

Not the Bank's lending programme, which had been shifted to new areas anyway. Not Third World countries, being faced with a loan with low rates of return on capital investment, without having alternatives such as sharing of workshop facilities with vocational training centres, which in many cases are faced with a capacity utilization which is not optimal.[3]

However, such an approach would be in line with the long-term aim referred to in the World Bank Education Sector Policy Paper (1980) of arriving at a comprehensive system of formal and non-formal education at all levels.

IDRC

The International Development Research Centre (IDRC) approaches the need for and the role of research in Third World development through the enhancement of research capacity in developing countries. It supports research of direct relevance to and demonstrable potential for Third World development and it forges links and networks among researchers and others involved.

Apart from funding research conducted in and for the less developed countries by researchers of those countries, collaborative research designed to bring Canadian educational researchers and researchers from the South together is equally funded.

According to the IDRC philosophy, a proper research infrastructure to be enhanced needs to foster links with beneficiaries and users of new knowledge, with colleagues in the South and possibly in the North, with the international development community and with research-funding agencies. The enhancement of research capacity and networks in developing countries is supported by IDRC through the following instruments:

- Group training both in qualitative and quantitative research in education. Those workshops will develop the potential of researchers in theoretical, conceptual, methodological and policy-related aspects of qualitative research. Such group training courses are taking place in Latin America, for South-East Asia in the Philippines (organized by Innotech), for East and Southern Africa in Kenya and in West Africa.
- Support of the establishment of graduate programmes in educational research (e.g. West Africa) and the awarding of educational research grants (e.g. Kenya, Botswana, Lesotho and Swaziland).
- Strengthening of the educational research environment and capacity in Sri Lanka through support to review research output during the post-independence period, and an assessment of current research capacity and constraints. An analysis of research gaps and recommendations concerning research priorities and ways of overcoming research constraints. In order to promote greater cohesion within the West African research community, both francophone and anglophone, an IDRC grant

provides low-level funding for meetings, individual research and consultancies.

- A long-term support intervention was provided to launch and further develop the Latin American Educational Documentation System (REDUC)[4] collecting, processing and disseminating research in Latin America through 15 associated centres in 14 countries. CIDE[5] as the co-ordinating centre of REDUC is now involved in the generation of a micro-computerized database of abstracts of research studies.
- The enhancement of Regional Research Review and Advisory Programmes in Education. Phase I of the South-East Asian Research Review and Advisory Group (SEARRAG) consisted of reviews of research and practice in language education, value education and school-based action research. In the second phase SEARRAG will create a bibliographic database of educational research in the region, produce a regional bibliography and a pool of research abstracts, conduct state-of-the-art reviews and will arrange for proper dissemination of results of educational research.

  Support was also provided to the Indonesian Action Research Network (JARI) to provide technical assistance, training and administrative support for four case studies on community education in poor rural and urban areas. Funds were provided to support the establishment of an Educational Research Network for Eastern and Southern Africa (ERNESA). In the second phase there is a shift of funding to national education research associations in Botswana, Swaziland, Lesotho, Zambia, Tanzania, Ethiopia, Uganda, Zimbabwe and Malawi. The possibility of more regional co-operation in training, documentation, dissemination and research will be explored.

Where a project includes collaborative research between Canadian and Third World research teams, IDRC will fund a meeting to develop the idea. As an example of a collaborative research project, the cooperation between Kenyatta University College (Nairobi) and McGill University (Montreal) may be referred to, examining the relationships between modes of cognition and skills taught in schools, and their utility in the formal and informal work place in Kenya.

IDRC is playing a substantial role in supporting Third World education research which is based on a research agenda of an indigenous character focusing on the link between education and social change and catering for qualitative approaches of participatory research. The problem of an adequate dissemination of the results of those research projects remains, although the establishment of REDUC has indicated a mode of accommodating this problem.[6]

SAREC

The Swedish Agency for Research Co-operation with Developing Countries (SAREC) refers to the following dimensions of its intervention strategy:

- Research should be useful in the developmental activities of Third World countries.
- Research should as far as possible be guided by developing countries and by their priorities.
- Research should be conducted in developing countries as far as possible by their own researchers.
- The heavy dependence of developing countries on research in industrialized countries ought to be counteracted by strengthening their indigenous research potential.
- There should be an emphasis on problem-solving oriented, hence inter-disciplinary research.
- Building bridges between Swedish universities and their counterparts in developing countries.

SAREC's policy, apart from sponsoring research by nationals from Third World countries, is to encourage and strengthen active research collaboration. Agreements of collaboration are drawn up containing identified specific research problems, well designed research plans and budgets, which cover joint research activities, easier access to scientific documentation and advice, and often include support for research training and scientific equipment as well.

There are several collaborative agreements between Swedish institutions and their partners in the Third World related to educational research.[7]

SIDA's support to the Northern Research Review and Advisory Group (NORRAG) favours a philosophy assessing how educational research in the North can be of support to the regional groups in the South (supported by IDRC), in overcoming constraints in their infra-structure for educational research.[8]

Both from IDRC and SAREC-sponsored collaborative research, it is difficult to obtain insight into a proper methodology for arriving at equal partnership in North-South collaborative educational research.

Types of collaborative research

We see at present a range from nominal collaboration (in order to get a research permit, to facilitate bureaucratic constraints, language and programming problems) to full-fledged collaboration reflecting equal partnership in the identification and definition of research tasks, in planning and carrying out research, in data-processing and analysis, in joint publication and in dissemination of the results. Yet the debate concerning the possibilities and constraints is still continuing.

A centre-periphery model is often applied to North-South collaborative research indicating its fundamental asymmetrical and unequal relationship which tends to reflect and to strengthen existing disadvantages in the international knowledge network. A special issue of the IDS Bulletin was devoted to issues related to cross-national collaboration.[9]

It was equally emphasized that the majority of so-called collaborative educational research projects in the Third World were the results of a Northern initiative to which the 'partner' of the South had to comply in view of a lack of funds from local sources for research. As the research design had been developed in the North it contained assumptions which were not valid in the South. In favour of joint projects, the same weakness of the research environment was stressed, as well as the possibility of catering for research which is contributing to social change rather than legitimizing the prevailing pattern of educational development, as the research design reflects both the insider and outsider point of view.

According to King the fundamental inequality in North-South collaborative research is especially apparent in the contract mode of research in which, following the six actor models developed by Reiff and Cohen (sponsors, researchers and users in both the North and the South), "the Northern agency conceives the research idea before the other actors move into operation" (King 1987). In the non-contract mode of collaborative research, according to Kenneth King in the same article, the research idea can be developed jointly between researchers in the North and the South, involving North and South expertise in a project in a developing country, comparative research in different countries on a similar theme (e.g. Students Learning Orientations Group, SLOG), and research projects originating from academic links between institutions in the North and South.

A large potential resource for North-South collaborative research emerges from donor-aided educational projects, requiring feasibility studies, identification and formulation missions and in many cases joint evaluation.[10] Project and programme-related educational research might be a source of more substantial North-South collaborative research with project built-in arrangements for research support, staff development and strengthening the research capacity and infrastructure, which may enhance sustainability upon completion of the donor-intervention.

Long-term arrangements involving academic links between institutions, research training and upgrading of the physical infrastructure for research in terms of data-processing facilities and enlarging of the documentary base may yield a higher rate of return on the investments from the Southern partners than short-term ad-hoc arrangements focusing solely on a tightly scheduled research project. There may well be a South-South component in North-South collaborative research. Moreover, South-South comparative research may be enhanced within the framework of a network involving selective support from the North playing a catalyst role and facilitating access to the body of research in the North. In this respect a Northern contribution to research networks such as the EPTA network might be equally classified under the broad range of collaborative research.[11]

Collaborative North-South research; The Netherlands

A 1984 inventory of Dutch projects and programmes dealing with research on education in developing countries identified 21 completed research projects and 17 running ones. Two-thirds of the research projects and programmes were initiated in the Netherlands, the majority of which consisted of studies of literature and other secondary resources aiming at preparing a thesis for a doctoral degree. In most cases of completed research Smits (1984) found that there was no form of collaboration at all with institutions in Third World countries. Only five projects established a form of collaboration with a research institution.

In only a few cases, reporting and publications reflected the collaborative arrangement with a Third World institution through a joint publication. Although the Netherlands employ a linkage scheme between university institutions in Holland and in the Third World countries, only two such schemes embodied educational research co-operation. These are the linkage schemes between the University of Groningen and the Eduardo Mondlane University (Maputo), and between the Free University of Amsterdam and the University of Botswana. The most interesting collaborative research projects by Droogleever Fortuijn and Oud, Cohen and Hoppers were described in some detail, including constraints met, in the special issue of the IDS Bulletin quoted above (1984).

Due to the fragmented educational research capacity in the Netherlands and the lack of priority assignment for educational research in the education and technology programme of the Dutch Minister for Development Co-operation, hardly any new signification collaborative research projects are to be reported upon since 1984. Cohen is involved in an ongoing comparative research and development project related to Manpower Planning and Education in several countries, including Pakistan, in co-operation with the World Bank and UNESCO, and involving several institutions and institutes in the countries concerned.

CESO's efforts

CESO started off in the sixties with large-scale traditional non-collaborative research into basic education in developing countries in general, and Tanzania in particular (CESO, 1969). At present CESO concentrates its research efforts on the fields of 'Education and Productive Life', 'Education and Cultural Identity' and 'Evaluation of Educational Activities'.

As for 'Education and Productive Life', Wim Hoppers conceived a collaborative research project on Youth, Non-Formal Training and Employment in Lusaka, which was conceived as a study leading to a dissertation to be submitted to the University of London for a Ph.D. degree. "As a result it became an individual project initiated and executed by one researcher only. Despite this constraint the project was firmly embedded in local institutional research" (IDS Bulletin 1984). Moreover, it proved to be the starting point of an intensive relationship of collaborative research activities, leading to his present involvement in a SIDA-sponsored project SHAPE (Self-Help Action in Education) involving the two Ministries of Education in Zambia.

CESO provided advice to the Delsilife project in the design and testing of an evaluation system to measure the impact of the Delsilife intervention system. CESO's advise was also directed to assistance in the development of a theoretical framework for Basic Life Skills. Finally, CESO was involved in the design of an evaluation and dissemination system for printed and audio-visual material developed within Delsilife.

Another field of research of interest to CESO relates to obtaining more insight in the meaning of indigenous knowledge and learning for the development of modern crafts. In order to exchange ideas about such research undertaken in South-East Asia, CESO organized, in co-operation with the Social Research Institute of Chulalongkorn University in Thailand, a workshop on the methodology and applicability of research in indigenous learning.

CESO in co-operation with the University Institute for Development Studies, IUED, Geneva and ENEA, Dakar, Senegal will organize a Workshop on Apprenticeship Schemes in francophone West Africa and Europe, aiming at the creation of a platform for experience between policy makers, planners, research staff and practitioners involved with training for employment in general and apprenticeship schemes in particular. This platform is to come up with proposals for research and development projects related to apprenticeship schemes in the region.[12]

CESO's main and largest involvement in collaborative educational research relates to evaluation of Dutch-aided projects with an education/training component. These evaluations are executed by a joint external evaluation team consisting of a CESO staff-member and an independent expert from the host country. Apart from the fact that these studies provide short systematic snap-shots of the efficiency and effectiveness of project interventions, rather than an in-depth analysis, the restricted and confidential character of the evaluation limits distribution within both the South and the North. The short time frame to execute and report on the evaluation prevents a truly collaborative approach based on equal partnership.

Moreover, time constraints restrict data-collection to interviews and analysis of secondary sources, not allowing for the application of methods suitable for impact analysis such as tracer studies.

If, apart from project evaluations, periodically more in-depth type of programme evaluations and sector analyses were undertaken, comparable to the SIDA evaluations of Swedish assistance to the vocational training sector and building upon data originating from project evaluations, there would be a pay-off in terms of adding to the existing body of knowledge originating from educational research.

Research proposal

In the previous sections we have sketched a picture of educational research which seems to be gloomy. Research priorities in the South are often originating from assistance criteria perceived by major donor agencies in the North. Assistance to the educational and training sector is too little based upon and guided by educational research findings. The poor infrastructure for educational research and the haphazard linkage between policy, practice and research is used as a legitimation of dumping Northern-conceived research and researchers in developing countries rather than providing systematic assistance to research training and development of the research infrastructure in the South.

We have pictured the impressive record of Dutch development assistance including support to training, education and research. Little interest and financial support, however, was noted concerning research on education in developing countries. In contrast, the approaches opted for by SIDA/SAREC and IDRC were sketched.

Research on education is both perceived to be in support of accommodating huge problems in developing countries in meeting human resources requirements for development, and for donor agencies to provide an empirical basis for their policies.

In the Netherlands, the Advisory Council for Scientific Research in Development Problems (RAWOO) recommended efforts towards basic strategic educational research focusing on the themes 'Education for All', 'Education, Labour Market and Employment' and 'Education and Culture' to be incorporated in a comprehensive collaborative research programme involving Dutch institutions and research institutions from the South.

A research proposal to design such a comprehensive collaborative research programme was prepared by CESO and endorsed by key researchers from Dutch universities involved with education research for development. It was submitted to the Directorate General for Science Policy of the Dutch Ministry of Education and Science and obtained formal approval in December 1988.

The research aims to arrive at a comprehensive programme of research in the field of education for development. This programme will consist of a number of research protocols covering research designs drafted by Dutch institutions and institutions in developing countries indicating the organizational structure, details on co-operative framework and delegation of authority, a budget and an outline of potential sources of funding.

The study, in designing the research programme, will build upon assessed needs for specific educational research identified by researchers and users of research results in developing countries matched with expertise available in Dutch universities (and universities in other countries of the North) and research institutions in the South. The study may indicate gaps in research capabilities in the South and how the collaborative project and other remedial interventions may assist in strengthening the research infrastructure.

Overlapping will be avoided by compiling an inventory of completed, on-going and planned research projects funded by international donor agencies or by national and regional organisations involved in education research in developing countries as well as by local universities.

The scope of the study will be restricted to the priority themes 'Education and Culture' and 'Education, Labour Market and Employment'. These will not only be approached from the educational domain but an intersectoral approach will be opted for. A strong interactive methodology will be applied involving as much as possible national education research associations in developing countries, Research Review and Advisory Groups in the South and NORRAG, institutional networks (UNESCO regional networks of educational innovation for development and ILO's regional information and documentation centres on vocational training), education researchers in the Netherlands and donor agencies.

Methodology for the design of a collaborative research programme.

An interactive approach will be opted for in identifying problems, assigning priority to specific topics, drafting the research design, outlining the organizational structure and identifying potential sources of funding.

This approach will involve the regional Research Review and Advisory Groups, educational research associations, research institutions and users of education research results in developing countries in identifying problems and specific research topics, as well as in the identification of institutions which are interested in and suitable for participation in the process of drafting the research designs.

Donors will be approached to assess the research topics identified related to their priorities for financing educational research. Studies of both educational plans and on-going, completed, and planned research will provide evidence for both relevance and uniqueness.

An inventory of expertise available in Dutch universities (and elsewhere in the North) will yield profiles of potential partners in the North.(13)

Given the potential surplus value to the South different modes of collaborative research may be envisaged:

- Equal partnership in all phases of the research, from design to publication and dissemination of results, by institutions in the South and North. The framework for such co-operation may be specifically designed for the research project, may originate from an existing linkage scheme between universities or relate to a framework linked to a Dutch aided development project.
- Comparative research on issues of relevance to both the North and the South, involving research in the specific countries in the South and North (Netherlands), arrangements being made for process monitoring and feedback mechanisms.
- Support by a Dutch institution to regional problems and theme-oriented South-South co-operation in the framework of research networks.

In terms of kinds of research eligible, emphasis will be laid on content research of a descriptive and analytical nature and action research excluding research focusing on analysis of secondary data such as is the case in state-of-the-art reviews.

As the research is supposed to contribute to problem solving it may tend to be implemented by a multi-disciplinary team enabling a multi-sectoral approach in its design and execution. This is obvious in topics related to the theme 'Education, Labour Market and Employment' but may also play a role in the theme 'Education and Culture', particularly if the identification of needs could lead to the identification of such research topics as indigenous socialization and learning process or distance education. Officially the programme designed should be restricted to institutions in South-East Asia (Indonesia), Pakistan, Southern Africa and Central America. However, if interesting proposals in other regions originate, CESO, in consultation with NORRAG, may play a brokerage role towards potential funding agencies and institutions in the Netherlands.

The limited extent of the research infrastructure in many developing countries leads to problems both in terms of achieving equal partnership in collaboration and sustainability. Therefore, within the collaborative agreement ways and means should be elaborated upon to strengthen the research capacity. This may be achieved both through research training and through information and documentation support.

The collaborative agreement and research proposal to be established between the different participating institutions should outline the different roles and obligations of the institutions in the different research phases.

Designing a programme for North-South collaborative educational research means balancing between bondage (the danger of the collaboration reflecting patterns of inequality in the present knowledge system) and razor's edge (the danger of collaboration being hampered by fruitless good intentions, confusions and lack of complementary surplus value).

As a steering mechanism, a strong interactive approach, an emphasis on identified needs and matching initiatives to strengthen the educational research infrastructure, has been opted for.

Epilogue

In December 1988, the Directorate General for Science Policy of the Netherlands Ministry for Education and Science approved and provided funding for the study. The first phase of the study was completed in April 1991.[14]

The first phase covered a global inventory of needs for educational research in developing countries based on the CESO Symposium; intensive contacts on the study with Research Review and Advisory Groups; consultative visits to some international organizations and consultation of the regional networks of UNESCO; extensive literature study and study of policy documents of international and regional organisations. Moreover, an extensive survey of available Dutch research expertise was made and published.[15]

It arrived at a global match of potential needs for educational research within broad themes 'education,labour market and employment' and 'education and culture', with availability of institution-based Dutch *expertise to be involved in multi-disciplinary collaborative research meeting policy relevance criteria.*

Within the study, substantial evidence was obtained as to the relevance of a research programme outline covering basic education and literacy, technical and vocational education and training and science and technology with special emphasis on specific needs of disadvantaged groups in urban and rural areas, gender issues and the cultural dimension of education and development.

This global programme outline to which a number of research topics have been added should constitute an adequate base to build upon in country specific educational research need inventories/ educational research environment studies, planned in the second phase.

Only research topics were incorporated which were suitable for collaborative research involving researchers from developing countries and the Netherlands and which demanded a multi-disciplinary problem-oriented approach.

Three countries will be selected for further involvement in the design and implementation of a collaborative educational research programme. The SADCC region, Central America and South East Asia (Indonesia) should be each represented. In consultation with national governments, the Dutch Ministry for Development Cooperation(DGIS) and Research Review and Advisory Groups, the three participating countries will be selected.

The second phase (planned to start late 1991 for some 15 months) is ultimately to lead to the design of research protocols fitting within the programme outline. This will include the identification of research teams from the Netherlands and the countries concerned agreeing to collaborative research partnership in all phases of the research. It will also cover identification of potential sources of research funding, subject to the elaboration of an adequate full-fledged research design being developed by the two partner institutions.

Field studies to be contracted out to institutions from the developing country concerned will be the most important instrument for country-specific research need inventories. The studies will build upon existing initiatives related to inventories of research needs and capacity (e.g. ERNESA inventory instruments, educational research environment studies among others related to Indonesia,inventories of expertise related to educational research among others available for South East Asia compiled by INNOTECH and on-going initiatives such as the World Bank programme on Building Educational Research and Assessment

Capacity).

The studies will concentrate on research infrastructure,including expertise available and research needs related to basic education, technical and vocational education and training and science and technology education and the interface of these domains with specific requirements of urban and rural poor and of women, considering the importance of specific cultural intervening variables.

A final report on the programme study will be prepared providing details on the process and outcomes and recommendations on procedures for managing and administration of the research programme originating from this programme design.

(July 1991)

Notes

1. SIDA: Swedish International Development Authority.
   SAREC: Swedish Agency for Research Co-operation with Developing Countries.
2. NORRAG News, No. 3, November 1987, Ed. by Christine McNab and Kenneth King, I.I.E., University of Stockholm, has a special section on The Netherlands. Budget figures for 1989 were derived from: Tweede Kamer, vergaderjaar 1988-1989, 20 800 hoofdstuk V, nr. 2, Den Haag: Staatsdrukkerij.
3. See: International Journal of Educational Development - Special Theme for 1988: Developments in Vocational Education and Training, ed. by W.W. Wilms and V.I. Ozanne. John Middleton, Changing Patterns in World Bank Investment in Vocational Education and Training: Implications for Secondary Vocational School.
4. REDUC: Red de Documentación y Información Para América Latina y el Caribe.
5. CIDE: Centro de Investigación y Desarrollo de la Educación.
6. The data on IDRC are based on the following publications:
   - With our own hands: Research for Third World Development: Canada's contribution through the International Development Research Centre: 1970-1985, IDRC, Ottawa, 1986.
   - IDRC-S earching Partners in Innovation, IDRC, 1986- International Development Research Centre; Projects 1981-1985.
7. See: SAREC project Catalogue 1987. Collaborative agreements relate a.o. to IIE/NIR, Botswana/ZIMFEP, Zimbabwe on educational language planning in East Africa, between IIE and the Curriculum Department, Ministry of Education, Ethiopia on reviving the use of

African languages in education.

Further information on SAREC was obtained from: 'SAREC's first decade: Swedish support for research in developing countries; a progress report with some guidelines for the future', ed. Mats Kihlberg, Stockholm, 1987.

8. See: NORRAG News, No. 5, November 1988.
9. IDS Bulletin, Educational Research: Issues in cross-national collaboration, October 1984, Vol. 15, No. 4. See also Altbach 1981.
10. See IDS Bulletin, Vol. 15, No.4, 1984, especially the articles by Salmi, Little, and King. See also the paper by Dr. V. Selvaratnam in the proceedings of the 20th Annual Conference of the British Comparative and International Education Society held in Hull, September 1985.
11. EPTA: Education and Production in Theory and Action. See Hoppers 1988.
12. CESO, IUED and ENEA organized the workshop on policies and practices of apprenticeship in francophone West Africa in Dakar, Senegal, from 25 September to October 3, 1989. The workshop was jointly funded by the European Communities and Swiss Technical Assistance DDA.

    See: Report Workshop on 'Les politiques et pratiques d'apprentissages en Afrique de l'ouest et en Europe, Rogier van 't Rood, CESO, The Hague, December 1989.
13. The first phase of the programming study will be completed by the end of 1990. It covered a global assessment of needs for educational research, an inventory of Dutch potential related to educational research for development and a global outline of research protocols to be elaborated upon in a subsequent phase through field visits to selected developing countries and further contact with potential donors.

    See: Programming Study - Report I: Inventory of Dutch Capacity - The Environment for Educational Research on Developing Countries in the Netherlands compiled by W.E. Biervliet, Social Science Information and Documentation Centre, SWIDOC, Amsterdam, 1990.
14. See: Final report first phase Programme Study, Research in the field of Education and Development, prepared by Wim E. Biervliet and Leo F.B. Dubbeldam, CESO, The Hague, 1991 (draft report).
15. Inventory of Dutch capacity: the environment for educational research on developing countries in the Netherlands, 1985-1990. Compiled by W.E. Biervliet, SWIDOC/CESO, Amsterdam/The Hague, 1990.

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27.

Education and Production in Theory and Action (EPTA): Learning from Networking in East and Southern Africa

Wim Hoppers

The article gives an overview of the origin and development of the EPTA network and its programme activities, and attempts to analyze the experiences of such a network as a mechanism for initiating and developing research in education and insuring greater interaction between policy makers, researchers and practitioners.
The overview is limited to the developments and experiences of EPTA in East and Southern Africa. For this region pointers are made about possibilities for future developments in this network.

This article is an attempt to explore some of the experiences and potential of networking in and with developing countries in the field of educational research. It will be done using a case study of a small network initiated in East and Southern Africa as part of an effort to encourage research in 'Education with Production' (EWP) across different socio-economic and political country situations around the world. The ideas for this research and its modalities were developed during an international workshop held in The Hague in 1985 and organized by CESO. The programme was given the name of Education and Production in Theory and Action (EPTA).

An exploration of the practice of networking in research is useful as it is regarded as an effective way of promoting research and disseminating its results. Currently there are several such networks in operation at international, regional and national levels and they vary in terms of purpose and scope.[1] A review of one such network, EPTA, in which CESO has been directly involved, will help to illuminate major topics of this symposium: the state of research on one important sub-theme of 'education and productive life' and the process of research as such.

The issues to be dealt with in this article are, first, to what extent networks are an effective means for persons to become involved in research; secondly, whether networks contribute to indigenous researchers becoming more dominant in setting a local research agenda - if not in developing alternative methodologies more relevant to local needs. Thirdly, there is the issue of such networks providing opportunities to bridge the gap between theory and action or, more specifically, between academics, policy makers, administrators and practitioners. Finally, there is an issue, very relevant to CESO, as to the role of 'Northern' researchers - individually and/or as part of an institution - in such research networks.

Networking and educational research

Although networks of researchers are generally initiated to share information rather than to change the structure of decision making, funding procedures or the conventional approaches to research, an active network has a potential of making members aware of a need for change. The information, openness and tolerance which characterize communication in networks make them suitable instruments to thrash out controversies and reach a broad consensus on new principles and values. Thus, what may start as a set of informal contacts between researchers with similar interests and concerns, may grow into a 'movement' within which more informal structures may emerge designed to achieve common objectives. Keywords are personal relationships, autonomy of the participants, decentralization of responsibilities, divergence of views but with underlying common values, open-ended membership (Lipnack and Stamps 1984).

There are, however, certain preconditions that underlie this notion of networking, particularly among researchers in developing countries. One is that members have access to a minimum of resources necessary for communication. These may range from reproduction facilities to a travel budget enabling members to meet at workshops or conferences. A second one is a degree of freedom within one's own institutional environment, permitting a researcher to pursue individual interests and to balance these against those of the institution as a whole. This is even more important where researchers wish to broaden the notion of 'researcher' and involve users such as administrators, project managers and teachers in (participatory) research. An important third precondition for a network to reach its full potential, and related to the previous one, is the prevalence of a climate in which researchers can adopt a more holistic view of social reality, accept a broader responsibility for the welfare of society that reaches beyond immediate academic concerns, and are prepared to what Lipnack and Stamps refer to as "risk stretching their creativity" (1984: 289).

It is within this general context that we can explore the developments of the EPTA network in Africa. There will be two parts: one being concerned with the field of study, education with production, and the general nature of research on this theme; the second one dealing with the actual network and what it has been able to do till this date. A final part of this article will deal with the lessons that can be drawn and the formulation of options for the future.

Education with production

The concept of education with production (EWP) refers to arrangements whereby a socially and economically meaningful component of education or training and one of production have been integrated within the same institutional setting (EPTA, 1985: 6). In Africa EWP is mostly associated with the incorporation of an element of practical training and of production into the activities of primary and general secondary education. Attention has also been given to the integration of production and skills training, especially in non-formal programmes for out-of-school youth. Here we shall limit our discussions to these two forms of EWP.

In a broader context debates on EWP among educationists and economists have become part of the controversies surrounding the merits and demerits of the 'vocationalization' of general education. Consequently, the literature on vocational education shows many references to production and work as part of pupil activities.

Yet it should be emphasized that 'vocationalized education' and 'education with production' are not identical concepts. Not only do they spring from different philosophical traditions, they also have different concerns that have important implications for organization, curriculum structure, financing etc. A central distinction is that vocationalization, in a pragmatist tradition, aims to make education more practical and above all a better preparation ground for working life after school. EWP and Education for Self-Reliance, on the other hand, with their roots in the marxist concept of polytechnic education as well as in various populist traditions, are interested in the educative value of work as such and its potential to make schools practise self-reliance, to develop socialist attitudes and values, and to make the school part of the community.

While the aims of vocationalization are primarily in the economic sphere, in EWP they are primarily in the social and moral spheres. Whereas the former concept in the main leads to the inclusion of additional 'practical' subjects into the curriculum ('diversification'), the latter leads to attempts to change the general structure of the curriculum and to give work activities a central place in the life of the school. Finally, while the advocates of vocationalization have a great concern for the practical application of skills and competencies, but less with the increased costs of such education, those of EWP want to integrate the practical education and the work experience, and by so doing recover part of the costs of education. EWP, therefore, is less concerned with adjustment than with transformation of education and reaches further than merely giving the school a vocational bias (cf. Lauglo and Lillis 1988).

In practice we find that the distinctions are not always so clearly made. The educational scene in East and Southern Africa offers a wide variety of innovations in work-oriented education and also of shades of opinion as to what they represent. In several countries programmes with different philosophies and aims exist side by side in the same segment of the education system, and even in the same schools.

In Tanzania secondary schools have a vocational basis as well as Education for Self-reliance projects. Zambian primary schools offer 'practical subject', but pupils are also involved in the school's 'production unit'. In Lesotho some high schools experiment with industrial arts, while others show efforts to develop an EWP approach. Separate but related innovations in different countries concern reform of examinations, decentralised administration, community schools, school co-operatives.

Research on EWP in East and Southern Africa

It is worthwhile to single out the literature that is directly concerned with EWP in these parts of Africa, to consider who have been involved in developing knowledge base in this field, and what issues have been addressed. Some time ago CESO produced a bibliography on EWP in East and Southern Africa, designed to assist the EPTA network with references to existing published and unpublished literature on EWP (Haket and Hoppers 1986). The bibliography drew on various data banks in the North as well as on CESO's own stock of (often 'grey') literature received from its contacts in the South.

A careful scrutiny of the bibliography, concentrating on those entries dealing directly and predominantly with aspects of EWP in the region, revealed the following details on numbers and authorship. The entries have been divided into a section dealing with prescriptive or advocacy writing and a section dealing with descriptions or assessments of actual EWP programmes and projects:

	Prescriptive		**Descriptive**		**Total**	
Authors	Formal	Nonf.	Form.	Nonf.	Form.	Nonf.
Donor Agencies	2	-	1	5	3	5
Non-indigenous authors	1	5	12	27	13	32
Indigenous authors	13	2	23	14	36	16
Total	16	7	36	46	52	53

The list can by no means pretend to be exhaustive. It is likely to be especially deficient on indigenous authors (indeed, Temu and Komba's listing for Tanzania is more elaborate). Also, internal donor reports are not included. Yet the table gives an impression of the relative interest in EWP in the region. Published writings sponsored by donor agencies are few and they are more in the non-formal than in the formal sphere. The latter includes UNESCO, the Gesellschaft für Technische Zusammenarbeit (GTZ) in Tanzania and the Swedish International Development Authority (SIDA) in Zambia (see United Republic of Tanzania 1982; Bergmann 1985; Republic of Zambia 1985).

EWP in formal education clearly suffers from a lack of interest on the side of national and multi-national agencies in the donor community. As to individual authorship, it is interesting to note that the attention for issues of EWP in formal education seems to exist more among indigenous writers (some are Ministry of Education) than among non-indigenous ones, while in the case of non-formal EWP activities it is the reverse. If we explore indigenous authorship a little further, we find that the researchers tend to be staff and students of universities, writing out of personal interest (doctoral dissertations), a departmental research programme or on request by local development agencies. In Tanzania, showing the largest number of entries (25), the Department of Education at the University of Dar es-Salaam has been prominent, with its well developed research programme and its own outlet 'Papers in Education and Development'. Less visible until now have been other organizations such as the Curriculum Department of the Ministry of Education in Ethiopia and the Zimbabwe Foundation for Education with Production (ZIMFEP), the latter a non-governmental agency directly involved in EWP in a small number of schools. In other countries, where EWP is less prominent, research efforts are more diffuse involving single persons within universities (Kenya, Lesotho).

Special mention must be made of the Foundation for Education with Production (FEP), based in Gaborone. FEP was established by Patrick Van Rensburg in 1979 as a regional promotional organization for EWP. It emanated from the long experiences with the development of EWP projects in Botswana, notably community schools like Swaneng Hill and the Brigades. These experiences have produced a good deal of literature, though mostly by Van Rensburg and other non-indigenous writers (e.g. Van Rensburg 1974, 1984a). FEP now runs a Newsletter and a journal (*Education with Production*) which has become an important medium for information sharing in the region. FEP has also facilitated the establishment of several national liaison committees with a similar promotional role, as in Zambia, Botswana and Lesotho.

Studies reveal an interest in 'conventional' vocational issues such as the economic output of production, internal (in-)efficiencies of school production, aspects of planning and management. But there were also attempts to examine the historical and ideological context of EWP (e.g. Sifuna 1976; Omari 1977; Van Rensburg 1984a; Gustafson 1987) and to explore much further the meaning of work in education, the nature of EWP's social, political and moral aims and the interaction with the local community (Chamungwana 1975; Komba 1980; Hoppers 1986a; Komba and Temu 1987).

In the process the weaknesses of EWP research also became clear: it tended to consist of isolated efforts, focusing on limited issues, often divorced from the broader context of social and economic development. While there were different interpretations of EWP and the protagonists had to defend their basic belief in the value of school production against the scepticism of many international scholars, there was little dialogue and even less joint action among those concerned. In addition, notwithstanding the exceptions, much of the research output had low visibility because of limited local and international dissemination.

The origins of the EPTA network

It is within this general research environment that EPTA started functioning. Its immediate roots internationally were associated with two developments, one of which was within the region. This is the articulation by FEP of its own research interest. The other concerns the development of a much broader international network of educational researchers stimulated by the Canadian International Development Research Center (IDRC) under the name of Research Review and Advisory Group (RRAG).

FEP was very keen on blending the theoretical and the practical in its activities. Research was meant to help "identify proven educational frameworks and methods which can be applied and adapted in projects (...). Projects can also be used for research to develop, in turn, new educational frameworks and methods." They are vital to "ensure that theoretical work is rooted and tested in practice and does not stray too far from reality" (Van Rensburg 1984b: 14). The idea, however, was that activities in countries should be undertaken with a national partner, preferably an autonomous national liaison committee. For research this meant that FEP would initiate guidelines and frameworks for research.

Research would concern itself with the socio-economic context of EWP; the conditions under which education can promote social change, if at all; and the part that EWP can play in this, whether or not linked to other features of alternative development, including curriculum, relations with surrounding communities, methodologies, organizational issues, and the economics of production. All this research would have to be action-oriented: for use in training courses, for application in projects or in information campaigns (idem:16).

During 1984 FEP developed contacts with the newly established RRAG group to enlist support for a directory of projects and annotated bibliography. As a result, EWP was adopted by RRAG as one of its concerns and assistance was promised to have initial consultations to map out the work to be done. At this stage CESO got involved and together with FEP an international workshop was prepared, to be held in The Hague in February 1985. A total of 18 persons was invited, recruited from among contacts of FEP, CESO and those in the RRAG network. They originated from Europe, Africa, North America, the Caribbean, Latin America and South Asia. Out of the 18, twelve researchers were connected to universities or research institutions, five represented donor agencies and the remaining one was Van Rensburg, director of FEP (see EPTA 1985).

The seminar explored relevant issues in EWP in various parts of the world and, most importantly, it agreed on a general agenda for research and mechanisms for implementing it (see ibid). Broadly endorsing FEP's research principles and interests, it suggested that the EPTA network could have three main goals:

a. "to bring together available information on EWP around the world and synthesize current understanding of such activities;
b. to conduct research (through selected fieldwork) on experiences within different socio-economic settings; to develop initiatives for action research;

c. to communicate experiences to a variety of audiences and in particular to assist FEP in its action programmes by helping to develop lines along which new initiatives for relating production to education could be taken" (EPTA 1985: 1).

A crucial decision was that the activities would be carried out by building up a broad network of persons interested in EWP. It was to be structured along regional lines with a strong input by some institutions, particularly FEP (the journal and newsletter) and CESO (library and documentation), and steered by an 'animation' group consisting of persons representing different regions who would stimulate exchange of information between regions and act as channels towards other organizations and donor agencies.

Thus it was basically left to the 'regional co-ordinators' to establish the network within their regions, identify priorities of activities, and initiate a programme of action. In this way the members of the networks could assist each other in analyzing the concept and practice of EWP in their own environment, give attention to dimensions that had hitherto been neglected, and come to their own assessment as to the meaning and relevance of production in schools. Support would need to be mobilized within the region as well as among donors with a particular geographical and/or thematic interest. The composition, format, and level of activities in the network would be determined by local needs and interests.

The development of the network in East and Southern Africa

The establishment of the nucleus of a network on EWP in this region owed much to the parallel development of ERNESA (Educational Research Network in East and Southern Africa). A first regional meeting for ERNESA was organized through IDRC in Nairobi in July the same year (1985). The proposed EPTA programme was on the agenda and through the regional co-ordinator, who was present, other interested researchers could be identified. They were invited to work out proposals for studies in their own countries which could be jointly submitted to potential donors: e.g. the Swedish Agency for Research Co-operation with Developing Countries (SAREC), SIDA and IDRC.

Eventually four countries responded: Ethiopia, Kenya, Tanzania and Zambia. All four opted for conducting a state-of-the-art review to be followed by a national seminar. Provisionally the intentions of the group were worked out by Dr. Komba, as regional co-ordinator, as follows:

a. "To establish a regional network of researchers and practitioners in EWP, who would work closely with FEP, and help to initiate activities within individual countries.
b. To carry out state-of-the-art/practice reviews in different countries so as to obtain an overview of what EWP programmes are in existence and what the current knowledge about them is.
c. Apart from having incidental regional meetings, to conduct national seminars within which local researchers and practitioners can gather, exchange experiences and identify needs for research and technical assistance.
d. To promote research and analysis of the processes and results of EWP activities in different institutional settings.
e. To initiate training of staff within universities and implementing organizations in action research for the identification, monitoring and investigation of ongoing EWP programmes.
f. To secure a continuous flow of information concerning educational research and development activities in the area of EWP." (Hoppers 1986b: 133-134).

It is of interest to consider the role of informal networking between persons in the North and the South that facilitated the developing of the EPTA network in the region. This networking was a by-product of various other formal activities during the period in which people with a particular interest in EWP in Africa participated. To give an idea the following can be listed:

- July 1985: African researchers meet at a regional RRAG meeting in Nairobi; birth of ERNESA.
- October 1985: regional RRAG co-ordinators meet Northern researchers at an annual conference of the Nordic Association for Education in Developing Countries in Stockholm.
- December 1985: several researchers and practitioners from Africa participate in a conference on transition from school to work, organized by CESO in Wageningen, The Netherlands.

These formal occasions were complemented by other ad hoc meetings, occasioned by Northern researchers visiting Africa (on missions) or Southern researchers visiting Europe (to attend meetings or take up studies). It became clear that for the development of a research network and the implementation of a joint research programme such 'piggy-backing' with its element of informal contact was as important as formal meetings specifically called for the purpose. Not in the least the formal occasions allowed for a personal interaction with interested donor agencies.

In April 1986 SIDA responded favourably to the regional proposals and provided funds for the following: state-of-the-art reviews with national seminars in the four countries that had applied, and joint regional activities, i.e. costs of networking, a regional seminar and participation in seminars outside the region. The latter was later changed into a second regional seminar, so that in the two year period of SIDA support (1986-1988) two regional seminars could take place: in Harare, organized by ZIMFEP (August 1986), and in Dar es-Salaam, organized by the Department of Education (June 1988). Both meetings brought together researchers from most countries in the region, with the exception of Angola, Mozambique, Malawi and Swaziland. In addition, FEP and CESO were represented.

The Harare seminar endorsed the general aims of the programme in the region and worked out the theoretical and practical details for the state-of-the-art reviews. For evaluation purposes it is useful to list the proposed aims of the reviews:

1. "To offer an overview of relevant Education and Production programmes and the current state of knowledge and understanding;
2. To inform about the extent to which real EWP programmes are in existence and to what extent we can assess their overall value;
3. To reveal the 'missing gaps' in current knowledge and provide a checklist for further research and practical action." (EPTA Programme 1986).

The reviews would analyze the range of EWP programmes, their policy objectives and underlying philosophies and assumptions. They would study examples of actual activities, look at the linkages between education, training and production, the technologies used, the influence of the North on the programmes, and consider general trends.

The meeting agreed on purposes, approach and methodology for the reviews in the four countries. It also agreed on the need for co-ordination, collaboration and unity of purpose within the network (Sekhamane 1986). It failed, however, to sufficiently stimulate other countries to work out their own research proposals.

By mid-1988, the official end of the first phase of EPTA in Africa, review studies had been completed in Ethiopia, Kenya and Tanzania[2], while a draft had been produced in Zambia. National seminars had been held in Zambia and Ethiopia. Reports at the Dar es-Salaam meeting suggested that all activities proposed could be completed by the end of 1988. Thus, at the same meeting, discussions on the outcome of the review studies could be

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followed by suggestions for a second phase (LEFEP 1988).

Observations about the process and outcomes of EPTA in Africa

Before we refer to further developments of the network it is relevant to first make some tentative observations about what has transpired and what appears to have been gained.

It was clear that, in direct terms, the network had been restricted to very few people, mostly academics located in a university department of education (Kenya, Tanzania, Zambia) and/or professional researchers located in a section of the Ministry of Education (Tanzania, Ethiopia). The latter position certainly had the advantage of easing the communication with policy makers and administrators. But even where teams of researchers were involved (again in Tanzania and Ethiopia), the network had not yet consciously attempted to ensure participation of administrators or practitioners.

The actual implementation of the review studies appears not to have been without problems. While (donor) funds were available, the main difficulties were limited manpower and limited time versus a variety of competing work assignments. Some of the pressures were internal: in the form of teaching, administrative duties and other local research work. But other pressures emanated from the economics of donor-initiated studies: the interest of donors in farming out evaluation studies to (often the same) local researchers, and the interest of the latter to oblige, partly in order to be involved in research at all, partly to augment a meagre university salary. Thus, while universities give considerable freedom to members to be engaged in research of their own choice, in practice the opportunity to participate in independent research remains rather limited. Further delays have been caused by lack of supporting facilities, especially access to transport. Considering the experience, it would appear that some institutional protection and support was very necessary for doing such personal-interest research in a meaningful way. Here institutions with a high regard for EWP (Tanzania, Ethiopia) did better than those where EWP had to struggle for recognition as a legitimate research area (Kenya, Zambia).

The principal value of the reviews[3] lies in their constituting a local effort to produce a synthesis of the existing, but scattered, research output and the current state-of-practice in EWP. By so doing they make the past research more visible and at the same time reveal what range of issues need further attention. The scope of the research agenda has now been broadened considerably, partly by extending the interest from production in education and training to a complementary concern for the combination of education, training and production in the work setting (see King's seminal paper on this issue - King 1985); partly by drawing attention to a wider variety of dimensions, for example the social and moral aspects besides the economic ones, the tensions between the theory of integration and the practicalities of management and organization, the contextual situation of institutions. The degree, however, to which the critical issues have been drawn out and the existing body of knowledge analyzed, varies - with the Tanzania study being the strongest on these points.

While the reviews seem to put EWP firmly on the educational research map and have laid a basis for a new research agenda, they have been of equal importance as an outcome of EPTA in the region in that they promoted a learning process among the participants on crucial issues of education and development. This learning appears to have been stimulated by the very fact of being part of a broader group in and outside the country sharing similar interests and ideas, as well as by the personal interaction generated by this network. The review exercises and the national and regional seminars, by confronting different experiences and interpretations, provoked a deeper exploration of the meaning of EWP and its implications, the nature of education in independent economies, and they led to new insights in its potential and limitations in helping to bring about a social transformation.

Some of this learning has been generated through the national seminars. These became vital occasions for dialogue with other actors involved in EWP (see Report on National Seminar Zambia 1987 and Report Ethiopia 1988). In Zambia, for example, the seminar was the first occasion for researchers, administrators and practitioners in different ministries and organizations to openly discuss their experiences with education, training and production. The same seminar, however, also illuminated the difficulties in local networking in EWP. Some of these concern difficulties in language and communication styles. Others emanate from different institutional cultures and lack of resources for communication. An interesting problem that emerged relates to the dual role of participants, especially among administrators and project managers: as representatives of their institutions or organizations with their specific viewpoints, official policies and practices on the one hand, and as individuals with their own perceptions, experiences and interpretations on the other hand. Unfortunately in most documents and reports the institutional view prevails, while 'think-pieces' as personal statements, typical of Western intellectual discourse, are rarely written, even by researchers. During seminars, in the ensuing discussions, very frequently the personal perceptions, hopes as well as frustrations come to the surface. Yet such instances of deeper analysis and exploration, of flashes of insight, rarely find their way into the documents. As a result, much of the collective gains of understanding remains hidden under a layer of formal statements. The network can only progress if the relevant shreds of verbal exchange can be taken as guiding lights in further informal communication.

Finally, in this set of observations a comment about the roles of FEP and CESO in the networking process can be made. Both institutions have made a vital contribution, partly by providing a conducive environment in which a network like EPTA could be inspired, partly by supplying and/or mediating the necessary resources to keep the process going. It became clear that a well-endowed institutional base of some kind was essential to maintain the international linkages of a network in resource-starved Africa and to sustain the overall momentum. In this role FEP clearly showed its advantages by being located in the region and by having a direct interest in the outcomes of the process.

Conclusions and prospects

This article contends that in principle networks can form a very stimulating framework for local persons to embark upon research, particularly on themes which, like EWP, do not often follow a dominant mode of thinking or constitute an accepted priority of research. They can only function effectively, however, if the participants receive a degree of moral and material support from their institutional environment. To an extent this is not the case and for further local networking small national groupings are very important in providing basic support and in serving as a unit for researchers, administrators and practitioners in joint projects aiming at educational and social change.

In its four years of existence the EPTA network, in as far as the East and Southern African part is concerned, has demonstrated its usefulness. This usefulness is related to the nature and status of the very concern of the participants. EWP as a concept, while official policy in several countries, is not a dominant mode of thinking. It takes a modest but rather controversial place among various schools of thought concerned with the relation between education, work and society. There are different interpretations of its various dimensions as well as of the value and outcomes of its practice. In many ways EWP is a 'counter' concept that is at variance with established practice. In such a situation a network as a 'counter-movement' has a function of bringing participants together to explore the meaning, nature and possible directions of EWP, and fuel a dialogue within and between institutions about the very nature of education and development. To this end a small beginning has been made. But the EPTA network still has a long way to go to examine the dynamics of EWP and present a good case for it in the international arena.

While the network needs to continue drawing upon individuals with a special interest, as was noted above, a degree of institutional backing is necessary to secure logistical support, protect researchers from too many alternative claims on their time and allow them to indulge in social obligations that reach beyond the conventional limitations of research work. Such backing also helps to improve legitimacy as well as draw wider support for the outcomes of the project. The Dar es Salaam meeting considered this point and put some emphasis on the need to form (FEP liaison) committees or stimulate existing ones into more vibrant action, especially in countries where EWP is not official policy or its research not a priority (e.g. Kenya, Botswana, Lesotho). In the latter case the committee can to some extent compensate for a lack of interest in each particular institution.

Not enough attention, however, was given to the potential of such committees to facilitate local networking. In my view this would need a high priority. There is a danger of EPTA remaining academic in orientation and losing its relevance if it cannot find the means to work directly with people in the schools, colleges and training or work centres. The current priority lies perhaps less in a dialogue between researchers and policy makers than in one between the former and the practitioners, and in finding ways to become jointly engaged in participatory research-cum-development projects. Researchers do not have to become practitioners, but they need to take a broader interest in the relevance of their work and its use for helping people to develop.

This kind of new dialogue may also help re-interpret the nature of studies to be carried out, re-define the research questions and search for alternative methodologies. Again, the Dar es Salaam meeting identified various possibilities for case-studies and more action-oriented research that can be undertaken as part of a phase II in the various countries. Indeed, in the case of ZIMFEP (Zimbabwe) and LEFEP (Lesotho), both present at the seminar, such interaction between theory and practice is more in line with their philosophy and ways of operation. It will be more difficult to develop such new research styles in the case of Kenya and Zambia where there is no active committee and the locus of research has remained within a rather isolated university environment. Yet, the professional researchers need to be challenged to develop new practical research questions and to design methodologies that allow for more field interaction. The excessive emphasis in the reviews on conventional survey instruments, leading to outcomes that are often incomprehensible to the practitioners, shows how much creative thinking still needs to be done (cf. Wright 1987).

Outside assistance, which is essential in upholding the process of this kind of networking, could be geared much more to supporting the above developments. Much assistance is wrongly used or never distributed for lack of an appropriate infra-structure to help identify interested researchers or to channel the support. In this respect research centres like CESO could make a significant contribution as they might establish intensive contacts with institutions and individuals in the South and help them to develop a research capability focusing on research themes relevant to local needs and interests. They could also mediate for external support or participate in the research on the basis of equality. Such participation might strengthen the research effort through additional manpower, a training component, or by raising the legitimacy of the research as a focus of attention.

Where possible, however, the mobilization and co-ordination of local researchers (and practitioners!) should be done by organizations closer to the local scene. External agencies could then concentrate on a provision of professional services, participation in the research itself and secure complementary financial and material support. In the case of EPTA much of the support CESO can give could run via FEP: by helping to strengthen its operational base as a co-ordinator of research, training and practice and as a centre for information sharing in the region. Some of the support could go directly to national research centres such as the Department of Education in Dar es Salaam. All in all, there is room for a much more active role for centres like CESO in helping to develop national and regional research infrastructures and promote the formation of networks.

Notes

1. Examples in Africa at the international level are the Educational Research Network in East and Southern Africa (ERNESA) and the African Participatory Research Network (APRN).
2. The Tanzanian team ended up being involved in two related review studies: one on Education for Self-Reliance in secondary schools, sponsored by FEP with funds from the Rockefeller Foundation; the other on WEP in vocational/technical training and in the work environment sponsored directly through the EPTA network. At the time of the Dar es-Salaam meeting the first had been completed and was principally reported on.

3. EWP state-of-art reviews were produced by: Haamujompa and Waddimba 1987; Temu and Komba 1987; Sifuna and Shiundu 1988; Dibaba et. al. 1988.

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28.

SEARRAG: Creating Support and Linkages for Educational Research in South-East Asia

Zainal D. Ghani

A brief description is given of the establishment of the South-East Asian Research Review and Advisory Group (SEARRAG) and its activities to date. The development of SEARRAG is traced as a regional organization highlighting the critical points of its evolution or development, such as the rationale for its establishment, its membership, organizational structure and activities. Some of the salient points are reported regarding educational research in the SEARRAG region arising from the different activities which it has organized.

In 1976, an international organization was set up with membership drawn from researchers in education both in the developed and developing countries and from some of the donor agencies. It was called the Research Review and Advisory Group (RRAG) and was formed with the support, both professional and financial, mainly from the Canadian International Development and Research Centre (IDRC) through the encouragement of an informal group of donor agencies which used to be called the Bellagio Education Group (see King, 1984). The formation of this RRAG organization was in response to the then growing concern amongst the donor agencies which made up the Bellagio group about the research and policy-making scenario that was, and to a large extent still is, found in most less-developed countries where, as described by Myers (1981)

> *"(...) communication between researchers, practitioners, policy-makers and funders was poor. Priorities guiding the funding of educational research within the Third World were seen as imposed from outside. Little attention was being paid to the synthesis of existing research results or diffusion of these to the developing countries. This is particularly true of research originating in the Third World. Finally, no mechanism existed for systematically identifying gaps in knowledge that might be filled through a concentrated program of research."*

Given the above scenario coupled with the lack of information on research carried out in the less-developed countries (LDCs), there was the tendency for most donor agencies to concentrate on research priorities and areas that were of interest and relevance to the developed countries rather than to the LDCs.

The formation of the international RRAG can be seen as an attempt by IDRC to create a mechanism or condition through which the LDCs could:

a. influence the setting of their research priorities;
b. enhance and strengthen the relationship between research and policy-making in education;
c. inform the educational community about the state of educational research in the LDCs; and
d. be assisted in securing funding for research relevant to their needs.

This mechanism had two components. The first was with the membership of the RRAG itself which, as King (1984) pointed out, was unique and innovative. The membership consisted mainly of prominent researchers from the LDCs having close links to the decision making units in their countries, and a few researchers from the developed countries. The membership of these researchers was not on an on-off basis but extended over several years and they participated in the RRAG on a personal basis, not as representatives of their countries or governments. This type of membership was able to create a certain amount of autonomy, continuity and informality which were some of the ingredients of RRAG's success.

The second component of the mechanism lays in the types of activities that were commissioned by RRAG. The main RRAG activity was the review of the state of education research (state-of-the-art) as related to the educational problems identified in the LDCs. RRAG was able to commission and sponsor, through IDRC and some supplementary help from the Ford Foundation, UNICEF and the World Bank, several state-of-the-art reviews of research in the LDCs on a global basis on areas such as teacher effectiveness, non-formal education and school finance. It was hoped that through these types of reviews the research existing in the LDCs would be identified and synthesized, which consequently would increase the possibilities of using research from the LDCs in policy-making.

However, notwithstanding the success of RRAG and the usefulness of its activities, some RRAG members from the LDCs by 1981 became concerned with the need to organize the RRAG-type activities on a regional basis so as to serve the needs of the researchers and policy-makers more effectively. Subsequently in the 1982 RRAG meeting in Jamaica a proposal was made to IDRC that RRAG activities should be regionalized so as to deal with the specific research and policy needs of the different regions.

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The establishment of SEARRAG

One of the international RRAG members who strongly felt the need for such an organization to be established regionally is Pote Sappanchai from Thailand. He felt that the international RRAG would not be able to increase the contact between researchers in the LDCs, whereas the establishment of a number of regional RRAG-type organizations would have a multiplier effect as more people from the LDCs would be involved. Furthermore, it was felt that these regional organizations would be more effective in:

1. pooling and disseminating research findings within and between countries;
2. facilitating the contact between educational researchers and policy-makers through both formal and informal linkages and networking;
3. encouraging the establishment of research associations in the region; and
4. assisting in setting up the educational research agenda for the region by providing a forum for discussions and review of regional and national policy and development issues.

Immediately after the suggestion was made to regionalize RRAG in the Jamaica meeting in 1982, Pote Sappanchai approached IDRC and proposed the setting up of a RRAG-type group in South-East Asia. IDRC was amenable to the proposal and prompted Dr. Sappanchai to consult some of the prominent educators in the region. In October 1982, a small meeting funded by IDRC was held in Bangkok with delegates from Indonesia, Malaysia, Singapore and Thailand. This meeting thus marks the birth of SEARRAG. Although the meeting readily accepted the idea of the establishment of SEARRAG, the participants of the meeting decided to test the viability of the group by setting themselves a task, which was the commissioning of national studies on the educational research environment. This task was a test of the commitment and value attached to SEARRAG by its members, and the viability of SEARRAG depended on the successful completion of this task. As it turned out it was a herculean task since the members were working largely in their individual capacities.

Although this task took a long time to reach its desired end - the publication of a book on the educational environments for the region -, the efforts to complete this task and the close professional relationships that were formed as the result of these efforts made it clear that SEARRAG was a viable proposition. By the third meeting in 1984, SEARRAG felt confident enough to take on more activities and as a result of this meeting a plan of action was formulated which included such activities as 'state-of-the-art' and 'state-of-practice' reviews, research abstracting and clearing house functions. This plan of action was put to the IDRC and was funded by it for a two-year cycle.

At the end of this funding cycle, in 1987, an external evaluation of SEARRAG was commissioned by IDRC. The evaluation was very positive and supportive of SEARRAG, both in terms of its purpose and objectives, and of its activities. Basically, the evaluation had recommended that SEARRAG should continue to concentrate its efforts on facilitating and supporting linkages and networking not only among researchers and policy-makers, but also among the practitioners. As a result of this evaluation, IDRC continued its funding for another cycle, this time for three years. In December 1987, SEARRAG was registered in Malaysia as a non-profit-making organization or corporation with two main types of activities: the selection and commissioning of 'state-of-the-art' reviews on topics of current interest for the region, and the organization and administration of a regional educational abstracting service.

Identification of problems regarding Educational Research

In the course of carrying out its different activities, SEARRAG identified several problems relating to educational research in the region. Over time, these problems have influenced the setting of SEARRAG's objectives and consequently its activities. The main problems identified in educational research (see SEARRAG 1988) are the following:

1. A vast amount of research in education has been conducted in the countries in the region. By 1986, the Philippines had identified more than 6000 studies, Thailand about 1500 and Malaysia about 750. However, most of the research is produced for the fulfilment of degree requirements and remains unknown to the research and policy-making communities.
2. There is a tendency for research conducted in the region to be defined and designed in very narrow positive terms. A large proportion of studies identified in the region is quantitative in nature, with emphasis on survey and empirical approaches, mainly utilizing quantitative analyses.
3. Generally there seems to be very little impact of research on policy-making and on educational practice. Some exceptions tended to be 'commissioned or assigned' research rather than initiated by the researchers themselves. However, such research in the long run does not encourage the development of any commitment of the researchers to

particular research problems or areas, nor to the development of a viable research community.

4. While it was found that the research impact was low, it was recognized that what minor impact there was could take different forms: the immediate and highly significant impact of some of the 'commission' research, the lagged and indirect effects of some research, the slowly accumulative and diffused building up of awareness effected by other research.
5. There were very few signs of the existence of a viable and healthy research community in the region. Consequently, there was a lack of journals, associations, awards and collaborative research. There were very few linkages to be found between researchers in the different countries in the region.
6. The lack of incentives (other than the fulfilment of degree requirements) for research productivity is one of the prevalent problems in the region. There seem to be two possible reasons for this. One is that in these countries the 'publish or perish' environment does not exist in the places where research is conducted. Secondly, critical enquiry in most of the countries of the region is perceived as being a risky business.

Objectives of SEARRAG

The objectives of SEARRAG have evolved through several stages as a result of constant reflections and discussions in relation to the problems identified above. SEARRAG's attempts to meet the needs of the funding agencies and by the recommendations of the external evaluation.

At the general level, the objective of SEARRAG is to promote and carry out activities which will enhance the contribution of research results to the improvement of educational policy, research and practice in the region.

In specific terms, the objectives of SEARRAG as stated in its operational guidelines are:

1. To assess the stages of development and appropriateness of educational research in the South-East Asian region and its contribution to educational researchers, policy-makers and practitioners.
2. To be a forum where policy-makers and researchers may have the opportunity to pool and exchange information on research needs and priorities, to identify areas of common and divergent interests, to exchange and clarify ideas along common themes and priorities for national needs.

3. To be a catalyst in initiating work along common themes within the country or within the region, and to strengthen the role and impact of research in decision-making by involving policy-makers, researchers and practitioners in SEARRAG-like activities.
4. To play an advisory role whether as a group or as individuals when called upon to do so, to assist in the identification of suitable/available research and expertise/researchers for regional listing.
5. To support the development of both intra- and international research-practitioner communities and disseminate research findings to policy-makers and practitioners.

Innovative features of SEARRAG

This section describes what can be considered as the innovative features of SEARRAG. These include different aspects of the membership, structure, and activities of SEARRAG, both past and current. In the description of these features, attempts will be made to relate the rationale for them.

Membership

There are now three categories of membership for SEARRAG: full members, associate members and affiliate members. The evolution of the different categories of membership is very much related to the ongoing attempts by its members to clarify SEARRAG's roles and functions and to their constant concerns for the optimization of the impact of SEARRAG on the different educational communities in the region.

(a) Full members
There are now three full members from each of the six countries represented in SEARRAG which are Brunei Darusallam, Indonesia, Malaysia, the Philippines, Thailand and Singapore. There are four important aspects of the full membership which should be noted.

Firstly, the three members are chosen so as to represent the researcher, policy-maker and practitioner for each country. This type of representation was designed so as to facilitate:

- linkages between research, policy-making and the practice of education in each country;
- the identification of the needs and problems of each area of the education enterprise.

Secondly, SEARRAG has tried to draw into its membership individuals who are prominent in their areas of expertise either nationally or internationally. It was felt that prominence of the people who form the membership would increase the credibility of SEARRAG and hence its national and regional impact.

Thirdly, the members are appointed on a personal individual basis, and it was made clear that they do not represent their countries nor their institutions. This was done so as to facilitate a more open approach to discussions and to foster more informal and flexible relationships between the members. This will enable members to participate in more focused and deeper discussions relating to educational research issues and problems in their countries.

Lastly, the full membership was kept to the smallest possible number. In trying to keep the group small it is hoped to facilitate an informal yet close relationship between the members (as this was found to be very effective in the international RRAG set-up) and, perhaps more importantly, to make the funding of meetings more financially viable. However, to facilitate the introduction of new ideas and perspectives, a full member has to resign after five years of membership.

(b) Associate members

Associate members are representatives of different institutions which have some kind of relationship with SEARRAG. There are two types of associate memberships.

The first type consists of representatives from educational institutions which have formed professional relationships with SEARRAG. These professional relationships may be in the form of attendance at the SEARRAG annual conference, or the provision of consultation or evaluation by SEARRAG or its members on the institutions' programmes and activities. Usually these institutions are represented by their heads. Regional institutions such as INNOTECH and RECSAM (Regional Centre for Science and Mathematics Education) are now associate members of SEARRAG.

The second type of associate members is the representative of the donor agency that is currently funding the activities of SEARRAG. At present this member is the programme officer in social science from IDRC's Singapore office.

(c) Affiliate members

This category of membership was established to try to widen the involvement of the education community in SEARRAG without sacrificing the small informal grouping that has contributed to SEARRAG's effectiveness. The reasons for forming this category of membership are: to increase the linkages and networks at the national level and to create a pool of people who could be selected as future full members. It was hoped that these members would also be members of some type of educational association so that the networking could be further enhanced.

Administrative structure

The co-ordination of SEARRAG is rotated among the full members. Originally, the system was that a member would be elected at each annual meeting to become the co-ordinator for one year. This member was expected to co-ordinate the activities of SEARRAG on a part-time basis outside his/her normal work, using whatever facilities available in his own institution. However, as the activities and commitments increased a new system of administration developed.

In this new set-up, the co-ordination is undertaken on a national rather than individual basis and the period of co-ordination is extended to three years instead of one. The rationale for these changes is that with the increased number of people involved in co-ordinating, the increased work load can be shared among different people and different infrastructures. The increase in the period of appointment was done so as to allow the co-ordinators sufficient time to see through the different commitments and activities that are started in the period of their appointment.

Activities

The SEARRAG activities can be categorized into two types: those which relate to the collation and review of research, and those related to advisory work.

(a) Collation and review of research information

These activities have formed the bulk of the work undertaken by SEARRAG. They involve:

1. the studies on educational research environment;
2. the review of research in selected areas of interest;
3. the abstracting of research reports.

(1) Studies of the educational research environment.

These research environment studies (on Indonesia, Malaysia, the Philippines, Singapore and Thailand) were the first set of research activities to be carried out by SEARRAG. The intention of these studies was to describe the state-of-the-art of educational research in these countries and to identify the salient features of the country's environment which could influence the way in which educational research was conducted, as well as the use and the impact of these studies on decision-making. It was hoped that these research environment studies collectively could be used to identify the potentials for institution building, both nationally and regionally, for resource pooling and for mutual assistance. It was also hoped that these studies would be able to guide the initial steps in developing the regional agenda for educational research.

In order to facilitate these intentions, these research environment studies were published in a single volume with a synthesizing chapter providing a regional overview of the research environment in the ASEAN region. This book has now been distributed to various agencies and institutions in the region.

(2) Reviews of research and development in education.

These review activities have formed the main research thrust of SEARRAG. There have now been seven such reviews which can be classified into two types:

- the state-of-the-art reviews; these are reviews of literature or documents available on educational research carried out in the region; and
- the state-of-practice reviews; these are reviews of research and/or development activities in the region which may not have been published or documented in the public domain.
- State-of-the-art reviews

  So far there have been two such reviews, one for Malaysia and one for Singapore. Both have focused on research literature on language education, which seems to have been an important area of thrust in educational research for both of these countries.
- State-of-practice reviews

  Most of the review activities commissioned by SEARRAG seem to have been on the review of research and development activities in areas which are of current interest in the region. One of these areas has been values education. Although much discussion and work has been carried out in the different countries in the region on values education, there is a paucity of local literature on it. Hence, SEARRAG undertook to commission state-of-practice reviews on this subject in four of the SEARRAG countries, namely Indonesia, Malaysia, the Philippines and Thailand. These reviews have now been completed and have been distributed at the national level. Currently, a regional synthesis is being prepared based on these national studies and, when completed, will be published for wider distribution.

Another area in which a state-of-practice review was conducted was in technical and vocational education. This area of education is seen as one of the areas of potential interest both to the national policy-makers and to donor agencies. While it is very high on the research and developmental agenda of most of the countries in the region, there is, as in the case of values education, not much local literature on it. Thailand, through SEARRAG, has completed a state-of-practice review on technical and vocational education, with the other countries intending to follow suit in the future.

(3) Educational research bibliographic and abstracting service.
This activity has in recent years become the major commitment for SEARRAG. It became evident through the review activities carried out by SEARRAG that there is a wealth of research (if research is defined broadly and includes theses and dissertations) carried out in each country in the region. For example, there are about 10.000 studies in this field in the Philippines alone. However, many of these are not easily available even to researchers and policy-makers in each respective country. Very few of these studies are reported in the public domain, such as journals or monographs, either locally or abroad. A large number are theses or dissertations which are usually left unread on the shelves. A fair number are reports, usually mimeographed, submitted to the commissioning bodies to be filed away. Even large numbers of these go unreported. It was felt that these researches, at least in the form of abstracts, should be collected for dissemination among researchers and policy makers within the country and the region, and also internationally. A service through which these abstracts could be collected and disseminated efficiently would contribute to narrowing the gap between research and policy, and perhaps to the improvement of the quality of research in the region. In specific terms, this service is to perform two major functions:

1. the collection, storage and retrieval of abstracts on local research;
2. the publication and dissemination of
   - listing of bibliographical information on research
   - thematic collection of abstracts
   - state-of-the-art reviews of research.

This abstracting service is now in place and will become operational early 1989. The structure that is being used to collect and disseminate research information consists of a network of national centres co-ordinated through a central regional clearing house. The national centres are sited in a variety of institutions which have already been involved in the collection and collation of research information and thus have existing research information databases. In the Philippines, the national centre will be co-ordinated by the Philippines Association of Graduate Educators (PAGE) which has collected and abstracted about 10,000 studies to date.

In Thailand, Malaysia and Indonesia the national centres are located in the research and development units or divisions of the Ministry of Education, namely the Educational Planning and Research Division (EPRD) for Malaysia, the BALITBUNG for Indonesia, and the National Education Commission in Thailand. These institutions have been responsible for their respective Ministries to co-ordinate research and as such have excellent access to local research information.

Singapore and Brunei, on the other hand, are siting their national centres at an institute of higher learning, the Institute of Education for Singapore, and the Universiti Brunei Darusallam for Brunei, which are building their own research information databases.

The regional centre is sited in Malaysia at the library of the Universiti Sains Malaysia, using the computer hardware available there. There is now a full-time staff assigned to operate the system.

The national centres are expected to perform several functions. Firstly, they will collect, collate and abstract all available research in their respective countries. The abstracts will follow an agreed format and will contain bibliographic information as well as a description of the research. Secondly, the national centres will forward these abstracts to the regional centres regularly. Finally, these national centres will also act as national clearing houses for local dissemination. It is envisaged that through the use of computers, the national centres will have the complete collection of the regional database for dissemination.

In addition to the retrieval of information from databases for specific requests and for the state-of-the-art reviews that will be done regularly by SEARRAG, the dissemination of research information will also involve the publication of regular periodicals, bibliographies and annotated bibliographies, both in book form and on diskettes.

Advisory Activities

(a) Directory of experts in education.

The 'Directory of Experts' is a compilation of brief descriptions of people in the region who have made their mark in the field of education, either nationally or regionally, and who could be called upon to provide assistance or consultation on different aspects of educational research and development. The development of this Directory was a collaborative activity between SEARRAG and INNOTECH (a regional organization established by the governments of some of the countries in South-East Asia) and it was the first activity carried out by SEARRAG.

The Directory was developed with the objective of giving policy-makers in the different countries and also donor agencies easy access to information on people in the region who could be drawn in to assist with different research and development activities. Underlying the development of this Directory was the hope that more people from the region would be used in consultative work rather than expatriates from the North, based on the conviction that local people would be able to provide more relevant insights to the research and development problems and the needs of the region.

(b) Consultations

There are two types of consultation-like activities that have been undertaken by SEARRAG since its inception. The first type is related to the requests by different national and regional educational institutions or organizations to members of SEARRAG to give their professional views on projects or programmes that are being planned. This type of advisory or consultative activity is usually carried out as part of SEARRAG's annual meeting, where specific time is set aside for those interested institutions to make their presentation to the meeting. As the SEARRAG annual meeting is rotated around the different countries in the ASEAN region, institutions from different countries have the opportunity to make a direct presentation to SEARRAG. Sometimes individual members of SEARRAG have also been requested to be consultants to educational projects carried out by regional organizations.

The second type of advisory or consultation activities are reviews or evaluations of programmes carried out by different educational institutions in the region, and in some cases by the institutions themselves. For example, SEARRAG, through some of its members, has completed the evaluation of the current cycle of programmes for RECSAM and INNOTECH.

Concluding remarks

The above are only some of the activities that have been undertaken by SEARRAG. They were chosen to highlight the different strategies or mechanisms that have been developed in relation to its objectives. Other activities include the efforts, either at the personal or at the official level, made by members to create and maintain linkages between the different education communities in the respective countries, such as the Education Research Association (ERA) in Singapore, the annual research symposium organized by the Thai NEC and the Philippines PAGE. Included in these other activities are the continuous efforts that are being made to foster South to South linkages through the RRAG network and through such activities as abstracting and the creation of databases.

SEARRAG is now eight years old. It has taken all that time just to get started. Much credit lies with the members who in spite of their heavy commitments have kept the concept of RRAG alive, and with IDRC, for the flexibility of funding has matched very well the needs and problems that SEARRAG had over the years, while the professional and moral support given by its officers has sustained SEARRAG over some rough patches.

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Annex 1.
About the Authors

Eligio B. Barsaga (Philippines)
Senior Specialist (Research and Evaluation) at INNOTECH, the Philippines, with major expertise in educational management, educational research and development, mathematics education and computer-based education. Prior to his present position, held numerous positions as teacher, instructor, lecturer and assistant professor at universities and colleges in the Philippines. Has been involved in numerous educational research projects, in many instances as project director. Has published on a number of educational topics such as school performance, educational opportunities, academic achievements, indigenous learning, non-formal education and material development.

Wim E. Biervliet (Surinam)
Did migration research 1973-76 for ZWO, and training course evaluations for ITC in the Netherlands 1976-78. Joined the ILO in 1979 and was involved in non-formal education projects in South-East Asia, curriculum development and evaluation. Worked from 1982 to 1986 for the EEC, Brussels, on youth programmes and the transition from school to work, and information networks on inter-university co-operation. He joined CESO as a research fellow in 1986.

Ad J.J.M. Boeren (Netherlands)
Worked from 1979-1983 and 1985-86 as Communication Specialist for the FAO in East Africa. Was lecturer in Visual Communication at the Leiden State University, Anthropology Department, from 1983-85. Joined CESO as a research fellow in 1986. He has written on visual perception, visual communication and media.

Antonio Cabral de Andrade (Brazil)
Worked in Education and Human Resource Development Planning in Brazil and Uruguay as from 1962. Joined the ILO in 1970 as Chief Technical Adviser of an ILO Employment Planning Project in Peru, and became in 1973 Regional Adviser. Returned to Brazil in 1975 to hold high level positions in the Ministries of Education and Planning. Joined the ILO again in 1984 and is since 1986 Senior Official of the ILO Training Policy

Branch, stationed in Geneva. Was consultant to UNESCO, Organization of American States, and the World Bank. Has written articles on education with production, social policies, manpower planning and educational planning.

Eberhard Chambulikazi (Tanzania)
Graduated in 1977, major in Theatre and minor in Education. Has since acted frequently as a resource person for workshops on Theatre for Rural Development in Zambia and Tanzania. As a member of the Department of Art, Music and Theatre, he participated in a three-year project in Tanzania called Theatre for Social Development. Published on popular theatre and social change, and was from 1983-86 editor of the Union of African Performing Artists for Eastern Africa.

Cheng Kai Ming (Hong Kong)
Was trained as a mathematician and worked as a school teacher and school principal for fifteen years. Obtained a PhD in educational planning and policy analysis at the University of London. Was the founding chairman of the Hong Kong Council for Educational Administration, and now works as a Senior Lecturer in the Department of Education, University of Hong Kong. Has been involved in consultancy work for Unicef, IIEP, UNESCO and the World Bank. Is currently involved in research on rural basic education,vocational secondary education and higher education in China, specializing in finance, planning and management of the education system.

Anke van Dam (Netherlands)
Studied general and comparative education in Amsterdam. Acted as adviser and participant in an education project in Columbia. Joined CESO in 1987 to compile and write reports on the education situation in the ten programme countries of the Dutch governmental development co-operation. Has written on education for women and educational alternatives.

R.C. Devkota (Nepal)
Worked since 1971 as a school teacher, headmaster, development worker and literacy worker in Nepal. He contributed to various non-formal education projects (like SATA and UNESO), and founded the Non-formal Education Centre, aimed at the development of various non-formal education programmes, in 1984. He has developed various training and learning materials, and has written articles on education for rural development.

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Emiel Droogleever Fortuijn (Netherlands)
Staff member Department of Sociology, University of Amsterdam (UvA). Field research on local power structures (Greece), on social development strategies (Surinam) and on educational development and evaluation (Venezuela). Research in the Netherlands has been concentrated on three themes: transition of secondary to higher education, student counselling in secondary schools and the relation between education and labour market. President of the Dutch Association of Researchers on Education in Developing Countries (WGOO).

Leo F.B. Dubbeldam (Netherlands)
Director of CESO and professor of Education in Developing Countries at the Utrecht State University. Worked four years in the Civil Service in Netherlands New Guinea, before joining CESO in 1963. Conducted many studies on education in East Africa and South-East Asia, affiliated with ICED in 1979-80 and contributed to a study entitled "The World Educational Crisis" led by Dr. Philip Coombs. Member of the National Advisory Board for Development Co-operation (NAR) and the Advisory Council for Scientific Research in Developing Countries (RAWOO). Published various policy papers, concerning university co-operation and international education, as well as about the Netherlands policy or educational co-operation. Wrote a number of papers on current issues in education, both concerning quantitative developments and cultural aspects.

Kees P. Epskamp (Netherlands)
Joined CESO immediately after obtaining his Masters in Social Anthropology in 1977. Is in charge of documentation and editor of publications. Conducted evaluation studies of media supported educational projects in South America and Africa. Did extensive literature research on the use of media for development, especially small media and theatre. Co-ordinator of the CESO inter-university course on Education in Developing Countries, and for several years guest lecturer at the Department of Theatre Studies of the University of Amsterdam. Has written many articles on development support communication, in particular on popular theatre.

Jose C. Gatchalian (Philippines)
Is a full professor and former Dean of the School of Labor and Industrial Relations, University of the Philippines (1982-1988). In the field of industrial relations and workers' education he pioneered in the promotion of workers participation and labour-management co-operation in the Philippines. His recent researches include studies on culture and industrial

relations, child labour, underground economy in Metro Manila and a survey of labour-management consultation mechanisms. Holds an M.S.S. from the Institute of Social Studies in the Netherlands and a Ph.D. from the University of the Philippines.

Zainal D. Ghani (Malaysia)
Since 1972 lecturer in Science Education and Curriculum Studies. Presently professor of Education in the Universiti Sains Malaysia. Before 1972, worked as Education Officer in Brunei. Currently is director of project InSPIRE, Universiti Sains Malaysia. InSPIRE is a generic name for a series of projects focused at raising the achievement levels of primary school children in the rural environment in Malaysia. Also co-ordinator (in charge of information services and publications) of the South-East Asian Research Review and Advisory Group (SEARRAG).

Aklilu Habte (Ethiopia)
Joined the World Bank in August 1977 as Director of the Education Department. In July 1987 he became Special Adviser in Human Resources Development in the African Region. From 1958 he was with Haile Selassie I University, Addis Ababa, successively as Lecturer in Education, Head of the Department of Education, Dean of the Faculty of Arts, Associate Academic Vice President and, lastly, as President of the University (1969-1974). From 1974 to 1977 he served as Minister of Culture, Sports and Youth Affairs in the Government of Ethiopia.

He obtained a Master of Education and Doctorate from Ohio State University (1956 and 1958), and Hon. D.H.L. from Ohio State University (1972).

Habte has served on numerous boards, including the Executive Board of UNESCO, the Association of African Universities, the United Nations University Council, the International Council for Educational Development, and is a Distinguished Fellow of the Academy for Educational Development.

Wim H.M.L. Hoppers (Netherlands)
Was lecturer in Education, University of Zambia, from 1974-79, and joined CESO in 1982. Wrote extensively on educational/training issues related to out-of-school youth and school leavers in a wider societal context, and recently on issues in work-related education. Was working in Zambia, seconded to SIDA, as co-ordinator of the 'Self- Help Action Plan for Education' (SHAPE) of the Ministry of Education.

Zellynne D. Jennings (Jamaica)
Lecturer in Educational Foundations at the University of the West Indies (Jamaica) since 1976 and formerly Head of the Department of Educational Studies in the Faculty of Education. Through the Commonwealth Fund for Technical Co-operation she is presently curriculum development adviser to the Faculty of Education at the University of Guyana where she holds the post of Professor of Education.

Eileen Kane (Ireland)
Since 1984 Head of Department of Anthropology, St. Patrick's College, Maynooth, Ireland. Holds a PhD in Cultural Anthropology, University of Pittsburgh, Pennsylvania. Carried out various consultancies since 1970, e.g. for the ILO. Published on kinship, rural poverty, psychology, traditional economies, women and vocational training and other subjects. Is Irish government appointee to Advisory Council on Development Co-operation (ACDC) and Board member of HEDCO (Higher Education for Development Co-operation) and member of the Irish Board of the International Interdisciplinary Congress on Women.

Adri Kater (Netherlands)
Worked for the UN in Morocco in 1958-60 (community development), and for two Dutch musea from 1960-65. Joined the Africa Study Centre in Leiden in 1965 and moved to the Netherlands Universities Foundation for International Co-operation (NUFFIC) in 1977. At NUFFIC he initiated and co-ordinated inter-university development co-operations. Since 1977 he has been with CESO carrying out evaluations of educational projects, and doing research in indigenous knowledge and learning systems. He published on rural participation programmes, evaluation methods and indigenous learning.

Kenneth King (United Kingdom)
Is reader in Education and in African Studies in Edinburgh University, where he is currently director of the Centre of African Studies. His research interests include the analysis of the role of the donor agencies in education; technical and vocational education; science and technology education; and the informal and micro-enterprise sectors. He is the joint editor of NORRAG NEWS, and the author of many books and articles. His most recent book, *Aid and Education Research*, will be published by Longman in 1990.

George A. Malekela (Tanzania)
Has been teaching since 1975, first at the Dar-es-Salaam School of Accountancy, later on at the University of Dar-es-Salaam. Since 1986 he has held the rank of Senior Lecturer. He obtained a PhD from the University of Chicago in 1983. Published several papers on primary and secondary education and the impact of selection procedures in Tanzania.

Kan Feng Min (China)
Worked as a laboratory technician before taking up a study in English and American literature in Liaoning University, Shengyang, China. From 1977 to 1986 she worked as an English teacher at the Beijing University of Aeronautics and Astronautics. Obtained a Master's Degree, Women's programme, from the Institute of Social Studies in the Hague in 1988, and is currently conducting research on women's technical and vocational education and training in Beijing.

Jan L.P. Ooijens (Netherlands)
Joined CREFAL (1969-1973), Pátzcuaro, Mexico, a regional centre for adult education in the rural areas of Latin America. Since 1974, he is working at the section of Cultural Anthropology of Utrecht University. Obtained a PhD from the same university in 1986. During the past twenty years, repeatedly he has been involved in projects for adult education and rural development in Latin America, especially Mexico. He published books and articles on this theme.

Soehirman Patmo (Netherlands)
Lectured at the Social Academy in The Hague from 1978-81. Joined the ILO in 1981 and worked in Thailand and Indonesia for the ILO Regional Office in Bangkok and for the National Training Centre for Co-operative Development in Indonesia. Specialized in methods and techniques of adult education and the production of A-V aids. Planned training programmes and contributed to the design of training management systems. He started working for CESO in 1987.

Gerhard W. Peter (Netherlands)
Worked for FAO in South America from 1980-82 on the evaluation of training programmes. Moved in 1982 to the Latin America Division of the IFAD in Rome to co-ordinate the monitoring and evaluation activities of all projects in Latin America. Joined the International Education Programme of the Directorate General International Co-operation (DGIS) in the Netherlands as programme officer in 1985. Started working for CESO

in 1987.

Joannes Riberu (Indonesia)
Studied philosophy and theology and obtained a PhD in pedagogy. Since 1966 lecturer at various institutes of higher education, such as the Catholic University Atma Jaya and the Universitas Indonesia. Member of many committees and boards of governmental and non-governmental institutions in the areas of education, religion, national defence and media. Since 1987 member of parliament and member of Committee IX, concerned with education and culture, religious affairs, youth and sports. Has written books on lay-clergy, leadership, human relationships and adaptation in family life.

Daniel N. Sifuna (Kenya)
Became lecturer in the Department of Education of the University of Nairobi in 1975. Obtained a PhD from the same University in 1977, was promoted to associate professor in 1984 and is a full professor since 1988. Since 1986 he also acts as Chairman of the Department. Published books on primary and vocational education in Kenya, and articles on educational policy, industrial education and non-formal training in the informal sector.

Jose B. Socrates (Philippines)
From 1977-1989 Head, Research Division of INNOTECH (the Regional Center for Educational Innovation and Technology of the South East Asian Ministers of Education Organization - SEAMEO). In this period INNOTECH initiated and conducted various Research and Development Projects for the formal and non-formal education sector in the region, among others project DELSILIFE. Before joining INNOTECH he was Assistant Professor, College of Education, University of the Philippines (1964-72) and Director, Curriculum and Instruction Division, of the Fund for Assistance to Private Education (FAPE), 1972-77.

He obtained a Ph.D. in Education, Curriculum an Instruction at the University of Chicago in 1964.

Kla Somtrakool (Thailand)
Since 1987 Director, Nonformal Education Development Division, Nonformal Education Department, Ministry of Education, Thailand. Obtained a Masters in Adult Education at Morehead State University, Kentucky, USA, and a Doctorate in International Nonformal Education at the University of Massachusetts.

Started his working experience as a teacher in 1956, and taught at primary and vocational schools. Became Head of the Lifelong Education

Center Project in 1973, and was Director of the Vocational Training and Development Center in Prachinburi from 1982-87. Is part-time lecturer and research adviser at 4 universities in Thailand and chairman of the Agricultural Youth Training Center under His Majesty the King Project. Published on lifelong education and appropriate technology.

Leon Tomesen (Netherlands)
Obtained a Masters in mechanical engineering at the Eindhoven University of Technology in 1972. Was lecturer in the Netherlands from 1972-74, and at the Ibadan Polytechnic, Nigeria, from 1975-78. Developed a qualitative model for analyzing technical education systems in developing countries in 1979, and worked as educational and technical consultant for the Swiss Development Cooperation, attached to the University of Dar es Salaam, Tanzania from 1980 - 1984. Joined Gemco Industrial Development (G.I.D.) in 1985 as Chief Technical Adviser of 2 projects in Pakistan, and was Regional Director (South-West Asia) for G.I.D. from May-December 1988. Has written extensively on vocational training, small scale industries and appropriate technology.

Vichai Tunsiri (Thailand)
Deputy Director-General of the Department of Non-formal Education, Ministry of Education, since 1987. Before that Deputy Director-General of the Department of Curriculum and Instructional Development (1986-87), and Director of Education Planning (1984-86). Was Deputy Permanent Delegate to UNESCO from 1982-84, and from 1978-82 Director of External Relations, and Deputy Secretary-General for the National Commission for UNESCO. Held the position of Director of Curriculum Development from 1974-76 and that of Director of Education Research from 1976-78.

Sobhana Verghese (India)
Has been teaching History and English Language and Literature at various levels of education, and has been for the last four years Head of a large Secondary School (2000 pupils). Has been working in the field of text book enrichment for many years.

Note

1. Some of the biodata have been updated by the authors, the majority, however, reflects the situation of 1988.